SAMSUNG

PLASMA DISPLAY

Owner's Instructions

PL-50P5H

This device is a Class B digital apparatus.

Register your product at www.samsung.com/global/register

Important Warranty Information Regarding Television Format Viewing

Wide screen format PDP Displays (16:9, the aspect ratio of the screen width to height) are primarily designed to view wide screen format full-motion video. The images displayed on them should primarily be in the wide screen 16:9 ratio format, or expanded to fill the screen if your model offers this feature and the images are constantly moving. Displaying stationary graphics and images on screen, such as the dark side-bars on nonexpanded standard format television video and programming, should be limited to no more than 5% of the total television viewing per week.

Additionally, viewing other stationary images and text such as stock market reports, video game displays, station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. ***Displaying stationary images that exceed the above guidelines can cause uneven aging of PDP Displays that leave subtle, but permanent burned-in ghost images in the PDP picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars.***
On PDP models that offer picture sizing features, use these controls to view different formats as a full screen picture.

Be careful in the selection and duration of television formats used for viewing. Uneven PDP aging as a result of format selection and use, as well as burned-in images, are not covered by your Samsung limited warranty.

User Instructions

Screen Image retention

Do not display a still image (such as on a video game) on the plasma display panel for more than several minutes as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, refer to page 45 of this manual to reduce the degree of brightness and contrast of the screen when displaying a still image.

Altitude

The PDP will not operate normally at altitudes above 6500 ft.

Heat on the top of the PDP TV

The top side of the product may be hot after long periods of use as heat dissipates from the panel through the vent hole in the upper part of the product.
This is normal and does not indicate any defect or operation failure of the product.
However, children should be prevented from touching the upper part of the product.

The product is making a 'cracking' noise.

A 'cracking' noise may occur when the product contracts or expands due to a change of surrounding environment such as temperature or humidity. This is normal and not a defect of the unit.

Cell Defects

The PDP uses a panel consisting of 1,230,000(SD-level) to 3,150,000(HD-level) pixels which require sophisticated technology to produce. However, there may be few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

Avoid operating the TV at temperatures below 5°C (41°F)

A still image displayed too long may cause permanent damage to the PDP Panel.

Watching the PDP TV in 4:3 format for a long period of time may leave traces of borders displayed on the left, right and center of the screen caused by the difference of light emission on the screen.
Playing a DVD or a game console may cause similar effect to the screen.
Damages caused by the above effect are not covered by the Warranty.

Afterimage on the Screen.

Displaying still images from Video games and PC for longer than a certain period of time may produce partial afterimages.
To prevent this effect, reduce the 'brightness' and 'contrast' when displaying still images for a long time.

Warranty

Warranty does not cover any damage caused by image retention.
Burn-in is not covered by the warranty.

Table of Contents

General Information

Your New Plasma Display Panel.....8

Remote Control Buttons 11

Wall Installation Instructions.....13

How to assemble the Stand-Base 17

Connections

Connecting VHF and UHF Antennas 20

Connecting Cable TV 21

Connecting a VCR 23

Connecting a Camcorder 24

Connecting a DVD Player (480i, 480p) 25

Connecting a DTV Receiver (480p, 720p, 1080i) 26

Connecting to HDMI (High Definition Multimedia Interface) (480p, 720p, 1080i) ..27

Connecting a Digital TV Set-Top Box (480p, 720p, 1080i) 28

Connecting to an Analog Amplifier 29

Operation

Turning the TV On and Off 32

Plug & Play Feature 34

Memorizing the Channels 37

Adding and Erasing Channels 39

Viewing an External Signal Source.....41

Picture Control

Changing the Picture Standard 44

Customizing the Picture Settings 45

Viewing the DNIe Demonstration 47

Changing the Screen Size.....48

Viewing the Picture-in-Picture.....50

Setting the My Color Control Mode.....56

Sound Control

Customizing the Sound 62

Using Automatic Sound Settings 63

Setting the TruSurround XT.....64

Choosing a Multi-Channel Sound (MTS) track ..65

Using the Auto Volume 66

Setting the On/Off Melody 67

Selecting the Internal Mute 68

Channel Control

Fine Tuning Analog Channels 70

LNA (Low Noise Amplifier) 71

Connecting a PC and Operation

Connecting a PC 74

Changing the Position of the Image 78

Picture Quality Adjustment.....79

Image Reset.....82

Time Setting

Setting the Clock 84

Setting the Sleep Timer 85

Setting the On/Off Timer.....86

Function Description

Selecting a Menu Language 88

Digital Noise Reduction.....89

Setting the Blue Screen 90

Using the Color Weakness Enhancement Option 91

Viewing Closed Captions 92

Using the Energy Saving Feature 93

Preventing Screen Burn-in 94

Reducing the Effects of Screen Burn 95

Appendix

Troubleshooting 98

Care and Maintenance 99

Specifications.....100

Note

- The information contained in this Owner's Instructions is subject to change without prior notice for improvement, and may vary depending on the version of the TV's software and the regional conditions.

SAMSUNG

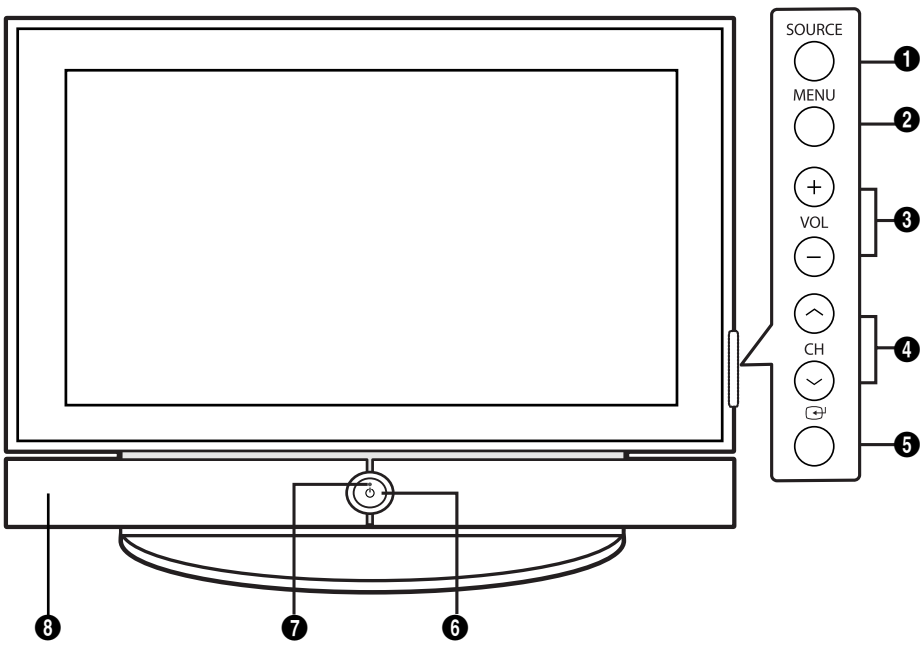
PLASMA DISPLAY PANEL

General Information

Your New Plasma Display Panel 8
Remote Control Buttons 11
Wall Installation Instructions 13
How to assemble the Stand-Base.....17

Your New Plasma Display Panel

Front Panel



1 SOURCE button
Press to display all of the available video sources (TV, AV1, AV2, S-Video1, S-Video2, Component1, Component2, PC, and HDMI).

2 MENU button
Displays the main on-screen menu.

3 VOL +, - buttons
Press to increase or decrease the volume. Also used to select or adjust items on the on-screen menu.

4 CH(∧, ∨) buttons
Press CH∧ or CH∨ to change channels. Also used to move up or down in the on-screen menu.

5 (Enter) button
Press to confirm a selection.

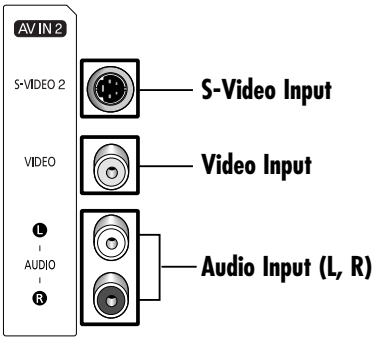
6 Power button
Press to turn the TV on and off.

Power indicator
- Power Off : Blue
- Power On : Off

7 Remote Control Sensor
Aim the remote control towards this spot on the TV.

8 Speakers

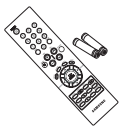
Side of the TV



Checking Accessories

Once you have unpacked your TV, check to make sure that you have all the parts shown here.
If any piece is missing or broken, call your dealer.

Owner's Instructions


Remote Control/
AAA Batteries

Power Cord

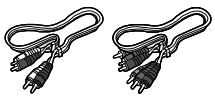
Warranty Card/
Registration Card/
Safety Guide Manual
(Not available in all locations)

The following parts are sold separately and are available at most electronics stores.

S-VIDEO Cable

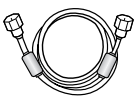
HDMI Cable

HDMI/DVI cable

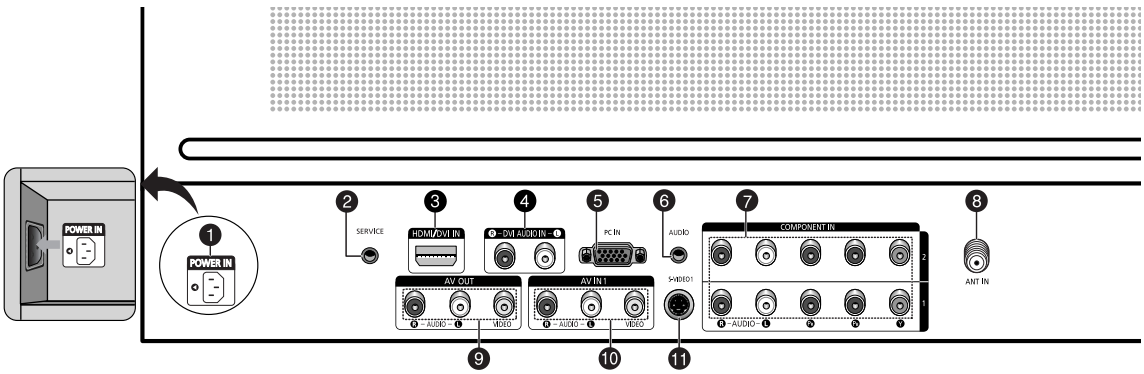

Component Cables (RCA)

PC Cable

PC Audio Cable


Antenna Cable

Rear Panel



❶ POWER IN
Connect the supplied power cord.

❷ SERVICE ONLY
Connector for service only.

❸ HDMI/DVI IN
Connect to the HDMI jack of a device with HDMI output.
These inputs can also be used as a DVI connection with separate analog audio inputs. An optional HDMI/DVI cable will be necessary to make this connection.
When using the optional HDMI/DVI adapter, the DVI analog audio inputs on your TV allow you to receive left and right audio from your DVI device. (Not compatible with PC)

❹ DVI AUDIO IN (AUDIO-L/R)
Connect to the DVI audio output jack of an external device.

❺ PC IN
Connect to the video output jack on your PC.

❻ PC AUDIO IN
Connect to the audio output jack on your PC.

❼ COMPONENT IN 1, 2
Video (Y/P_B/P_R) and audio (L-AUDIO-R) component inputs.

❽ ANT IN
75Ω Coaxial connector for Air/Cable Network.

❾ AV OUT (VIDEO / AUDIO L/R)
Connect to the audio/video input jacks of a recording VCR.

❿ AV IN 1 (VIDEO / AUDIO L/R)
Video and audio inputs for external devices, such as a camcorder or VCR.

⓫ S-VIDEO 1
Video input for external devices with an S-Video output, such as a camcorder or VCR.

Notes

- Please be sure to match the color coded input terminals and cable jacks.
- For further details about connections, refer to pages 20-29.
- Whenever you connect an audio or video system to your television, ensure that all elements are switched off. Refer to the documentation supplied with your equipment for detailed connection instructions and associated safety precautions.

Remote Control Buttons

Remote Control

❶ **POWER button**
Turns the TV on and off.

❷ **Number buttons**

❸ **+100 button**
Press to select channels over 100. For example, to select channel 121, press "+100", then press "2" and "1."

❹ **MUTE button**
Press to mute the TV sound.

❺ **VOL (Volume) buttons**
Use it to adjust volume.

❻ **SLEEP button**
Press to select a preset time interval for automatic shutoff.

❼ **MENU button**
Displays the main on-screen menu.

❽ **ENTER button**
Confirms a selection.

❾ **PRE-CH button**
Tunes to the previous channel.

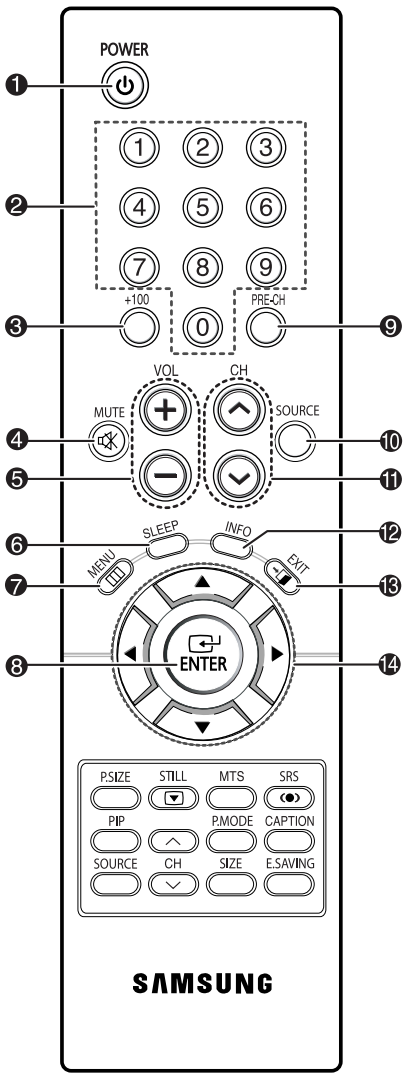
❿ **SOURCE button**
Press to display all of the available video sources (TV, AV1, AV2, S-Video1, S-Video2, Component1, Component2, PC, and HDMI).

⓫ **CH (Channel) buttons**
Use it to switch channels.

⓬ **INFO button**
Press to display information on the TV screen.

⓭ **EXIT button**
Press to exit the menu.

⓮ **Up/Down/Left/Right buttons**
Control the cursor in the menu.



Continued...

⑮ **P.SIZE button**
Select Picture size. (Refer to page 48)

⑯ **STILL button**
Press to pause the current screen.

⑰ **PIP button**
Activates picture in picture. (Refer to page 50)

⑱ **SOURCE button**
Press to select a signal from an external source in PIP.

⑲ **PIP control buttons**
CH ∧ , ∨ : Displays the available channels in sequence. (These buttons change channels in the PIP window only.)

⑳ **SRS button**
Selects Trusurround XT mode.

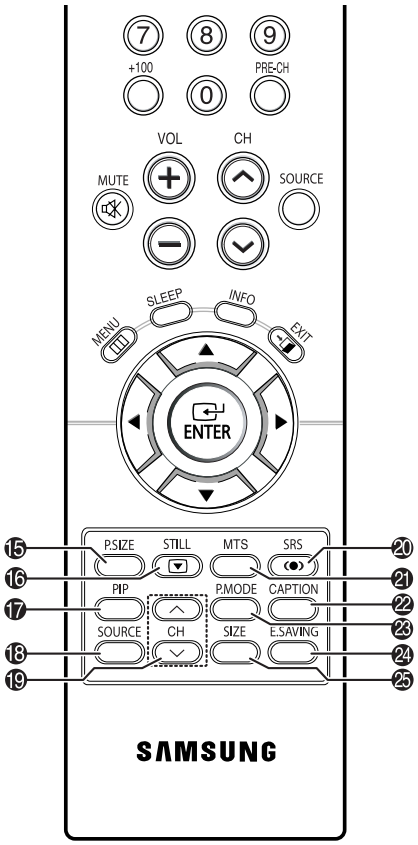
㉑ **MTS button**
Press to choose stereo, mono or Separate Audio Program (SAP broadcast).

㉒ **CAPTION button**
Controls the caption decoder.

㉓ **P.MODE button**
Adjust the TV picture by selecting one of the preset factory settings (or select your personal, customized picture settings). (Refer to page 44)

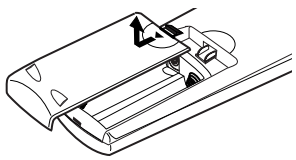
㉔ **E.SAVING button**
Press to adjust screen brightness according to surrounding environment. (Refer to page 93)

㉕ **SIZE button**
Press to change the size of the PIP window.

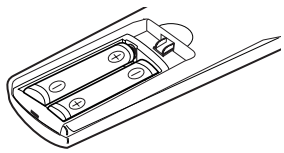


Installing the Batteries in Your Remote Control

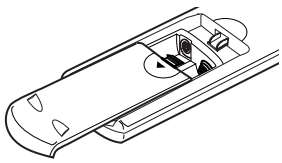
1 Slide the back cover to open the battery compartment of the remote control.



2 Install two AAA size batteries. Make sure to match the "+" and "-" ends of the batteries with the diagram inside the compartment.
- Do not mix battery types, i.e. alkaline and manganese.



3 Slide the cover back into place.



Remote Control Operation Range

You can use your remote control within a distance of 23 feet and an angle of 30 degrees from the left and right sides of the TV's remote control receiver.

Wall Installation Instructions

Refer to the correct installation guide according to your wall bracket.

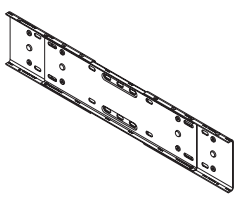
Installation Notes

1. Contact a technician for installing the wall bracket.
2. Samsung Electronics is not responsible for any damage to the product or injury to yourself or others if you elect to perform the wall installation.
3. This product is for installing on cement walls. The product may not stay in place when installed on plaster or wood (Ask your dealer).
4. Connect all external devices prior to installing the wall bracket.
5. The package contents and parts supplied for the wall mount are subject to change without prior notice.

Parts (Wall attachment panel is sold separately. Check with your dealer.)

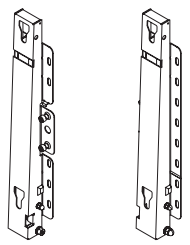
Only use the components and accessories shipped with the panel.

Wall Bracket



1

Hinge



Left : 1 Right : 1

Accessories

Plastic Hanger : 4

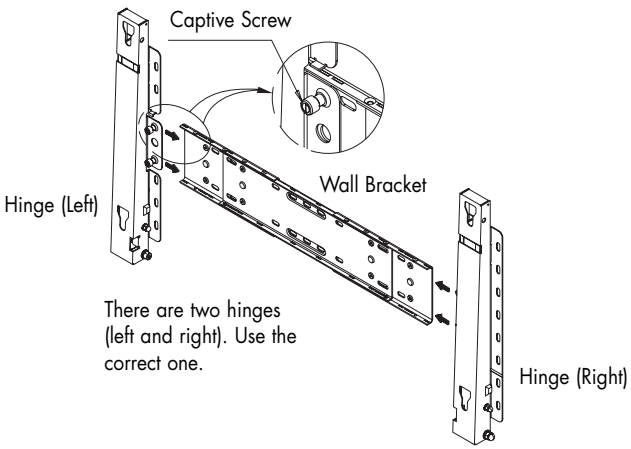
Screw ⓐ : 11

Screw ⓑ : 4

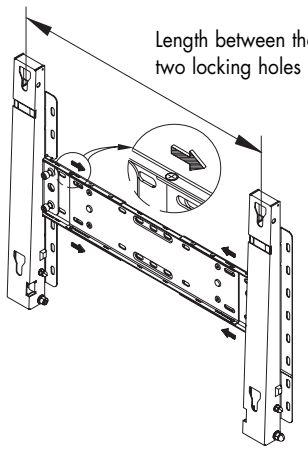
Anchor : 11

How to assemble the Wall Mount Bracket

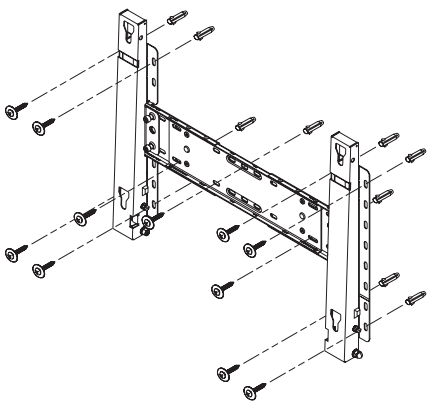
1 Insert and tighten the Captive Screw in the direction of the arrow. When done, mount the wall bracket on the wall.



2 Before drilling into the wall, check if the length between the two locking holes at the back of the product is correct. If the length is too short or long, loosen all or some of the 4 screws on the wall bracket to adjust the length.



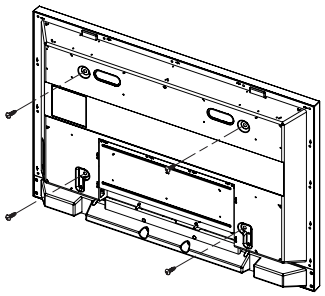
3 Check the installation diagram and mark the drill points on the wall. Use the 5.0 mm bit to drill holes deeper than 35 mm. Fix each anchor in the corresponding hole. Match each of the brackets and hinge holes to the corresponding anchor holes and insert and tighten the 11 screws @.



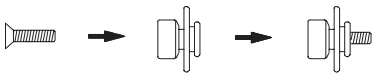
Fixing the TV panel to the wall attachment panel bracket

The shape of the product may vary depending on the model. (The assemblies of the plastic hanger and the screw are the same)

1 Remove the 4 screws on the back of the product.

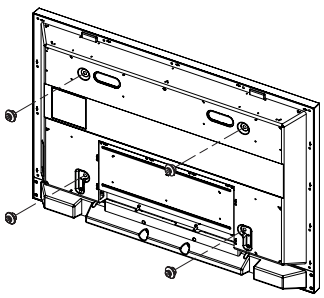


2 Insert the screw ⓑ into the plastic hanger. (See the figure below)

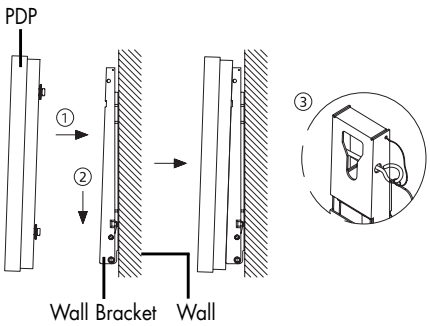


- Mount the product on the wall bracket and make sure it is properly fixed to the left and right plastic hangers.
- Be careful when installing the product on the bracket as fingers can be caught in the holes.
- Make sure the wall bracket is securely fixed to the wall, or the product may not stay in place after installation.

3 Tighten the 4 screws in step 2 (plastic hanger + screw ⓑ) to the rear holes of the product.

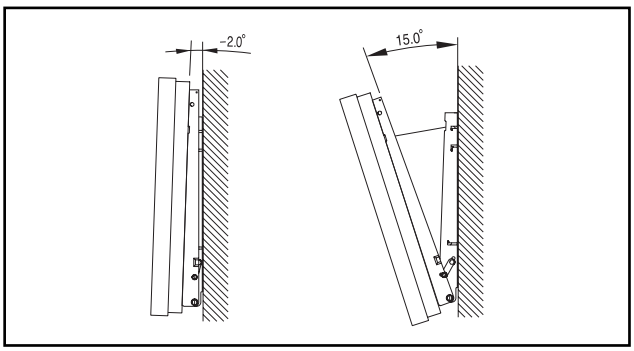


4 Remove safety pin (③) and insert the 4 product holders into the corresponding bracket holes (①). Then place the product (②) so that it is firmly fixed to the bracket. Make sure to reinsert and tighten the safety pin (③) to securely hold the product to the bracket.

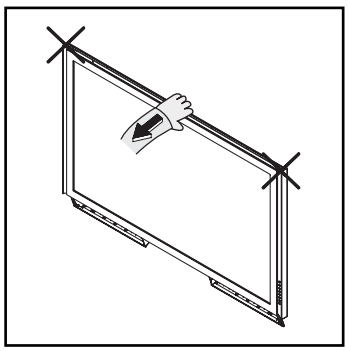


How to Adjust Mounting Angle

Note : Adjust the bracket angle to -2° before installing it on the wall.



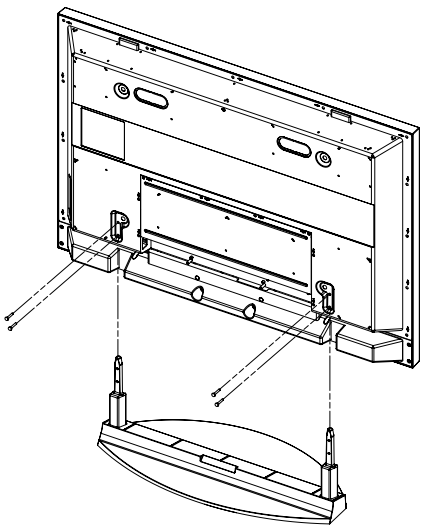
1. Fix the product to the wall bracket.
2. Hold the product at the top in the center and pull it forward (direction of the arrow) to adjust the angle. (See the figure to the right)
3. You can adjust the bracket angle between -2° and 15°.



Make sure to use the top center, and not the left or the right side of the product to adjust the angle.

How to assemble the Stand-Base

1 Using the 4 screws for securing the stand pegs and the monitor, firmly attach the monitor to the stand pegs. (The exterior of the set may be different than the picture.)



Warning

Firmly secure the stand to the TV before moving it, as the stand may fall and could cause serious injury.

➤ Two or more people should carry the TV. Never lay the TV on the floor because of possible damage to the screen. Always store the TV upright.

SAMSUNG

PLASMA DISPLAY PANEL

Connections

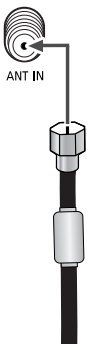
Connecting VHF and UHF Antennas 20
Connecting Cable TV.....21
Connecting a VCR.....23
Connecting a Camcorder.....24
Connecting a DVD Player (480i, 480p).....25
Connecting a DTV Receiver (480p, 720p, 1080i) 26
Connecting to HDMI (High Definition Multimedia Interface)
(480p, 720p, 1080i) 27
Connecting a Digital TV Set-Top Box (480p, 720p, 1080i) 28
Connecting to an Analog Amplifier.....29

Connecting VHF and UHF Antennas

Antennas with 75-ohm Round Leads

If your antenna looks like this: it has 75-ohm round leads.

1 Plug the antenna lead into the ANT IN on the TV.
Use an antenna cable. (Sold Separately)

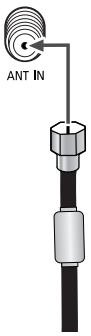


Connecting Cable TV

You can connect different cable systems to your TV, including cable without a Cable box, and cable with a Cable box that descrambles some or all channels.

Cable without a Cable Box

1 Plug the incoming cable into the ANT IN on the TV.
Use an antenna cable. (Sold Separately)

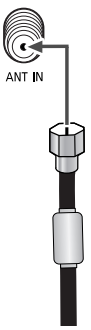


Cable with a Cable Box that Descrambles All Channels

1 Find the cable connected to the ANTENNA OUT terminal on your Cable box. This terminal might be labeled “ANT OUT”, “VHF OUT” or simply “OUT”.

Cable Box

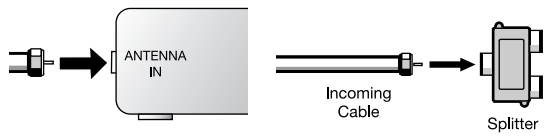
2 Connect the cable to the ANT IN on the TV.
Use an antenna cable. (Sold Separately)



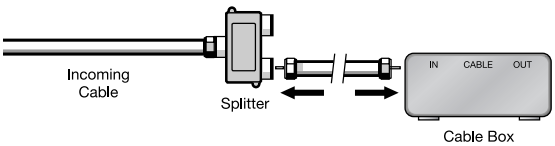
Cable with a Cable Box that Descrambles Some (But Not All) Channels

To complete this connection you will need a two-way splitter, an RF (A/B) switch, and four coaxial cables (which you can buy from your Samsung dealer or any electronics store).

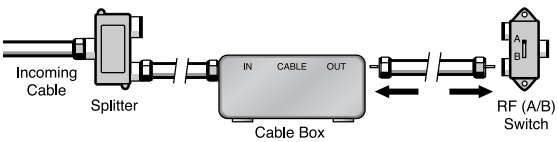
1 Find and disconnect the cable that is connected to the ANTENNA IN terminal of your Splitter. This terminal might be labeled “ANT IN”, “VHF IN” or simply, “IN”. Connect this cable to a two-way splitter.



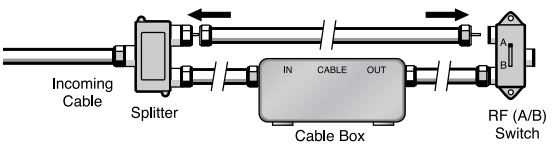
2 Connect a coaxial cable between an OUT terminal of the splitter and the IN terminal of the Cable box.



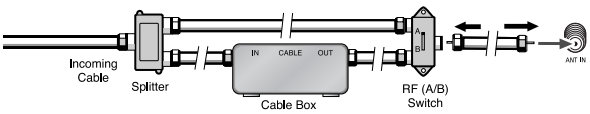
3 Connect a coaxial cable between the ANTENNA OUT terminal of the Cable box and the B-IN terminal of the RF (A/B) switch.



4 Connect another cable between the other OUT terminal on the splitter and the A–IN terminal on the RF (A/B) switch.



5 Connect the last coaxial cable between the OUT terminal of the RF (A/B) switch and the ANT IN on the TV.

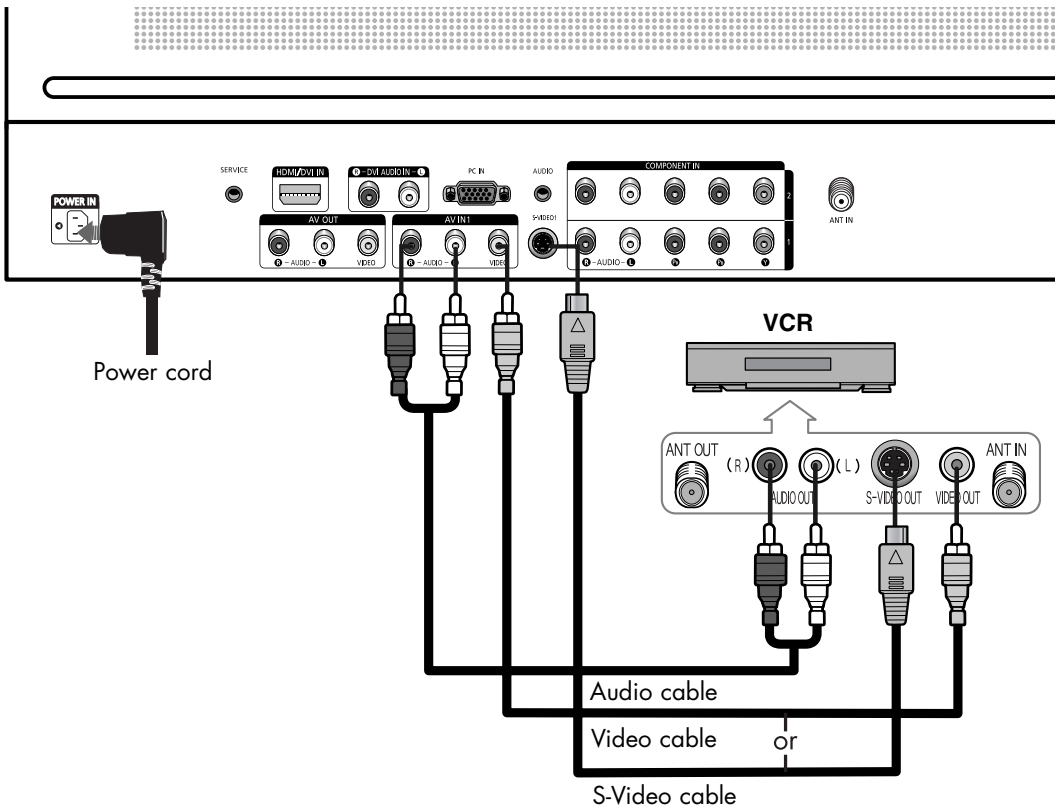


After you've made this connection, set the A/B switch to the “A” position for normal viewing. Set the A/B switch to the “B” position to view scrambled channels. (When you set the A/B switch to “B”, you will need to tune your Set-Top Box to the Cable box's output channel, which is usually channel 3 or 4.)

Connecting a VCR

Connecting a VCR to the Video or S-Video/Audio jack

TV Rear Panel



How to Connect

Connect the Video/Audio cables between the VIDEO or S-VIDEO/AUDIO input jacks on the TV and VIDEO or S-VIDEO/AUDIO output jacks on the VCR.
(Note: For better video, use an S-Video cable.)

Note

- Please be sure to match the color coded input terminals and cable jacks.

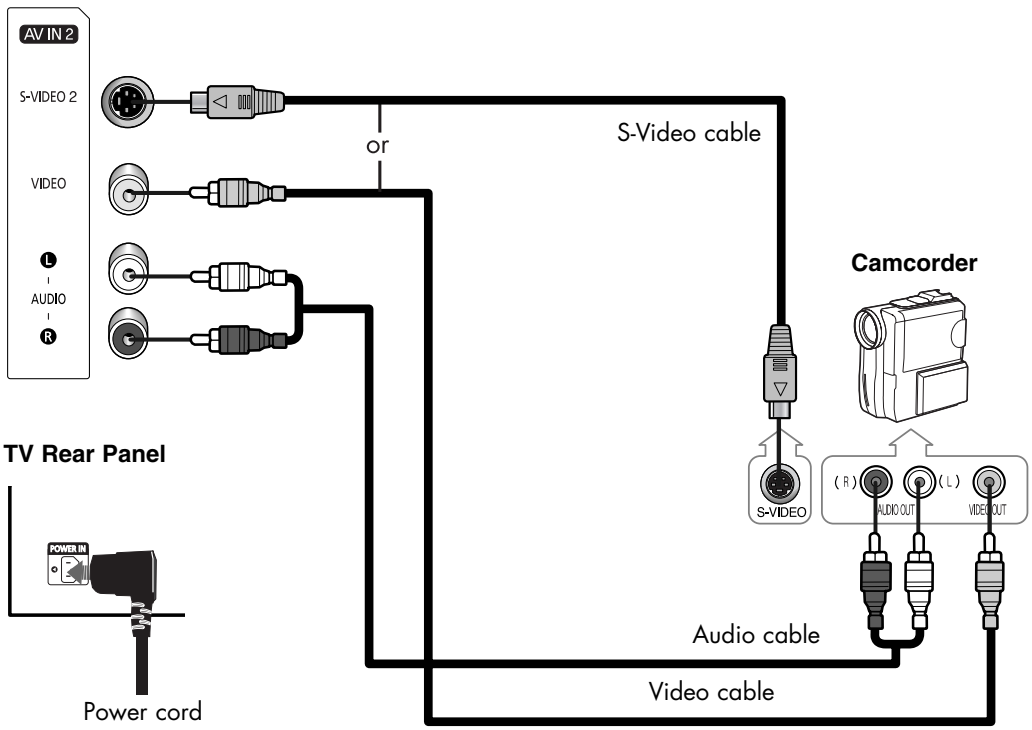
Videotape Playback:

1. Turn on your TV.
2. Press the SOURCE button to select “Video (AV1 or AV2)” or “S-Video (S-Video1 or S-Video2)”.
3. Turn on your VCR, insert a videotape and press the Play button.

Connecting a Camcorder

Viewing camcorder tapes

Side of the TV



How to Connect

Connect a Video/Audio cable between the VIDEO or S-VIDEO/AUDIO input jacks on the TV and the VIDEO or S-VIDEO/AUDIO output jacks on the camcorder.
(Note: For better video, use an S-VIDEO cable.)

Note

- Please be sure to match the color coded input terminals and cable jacks.

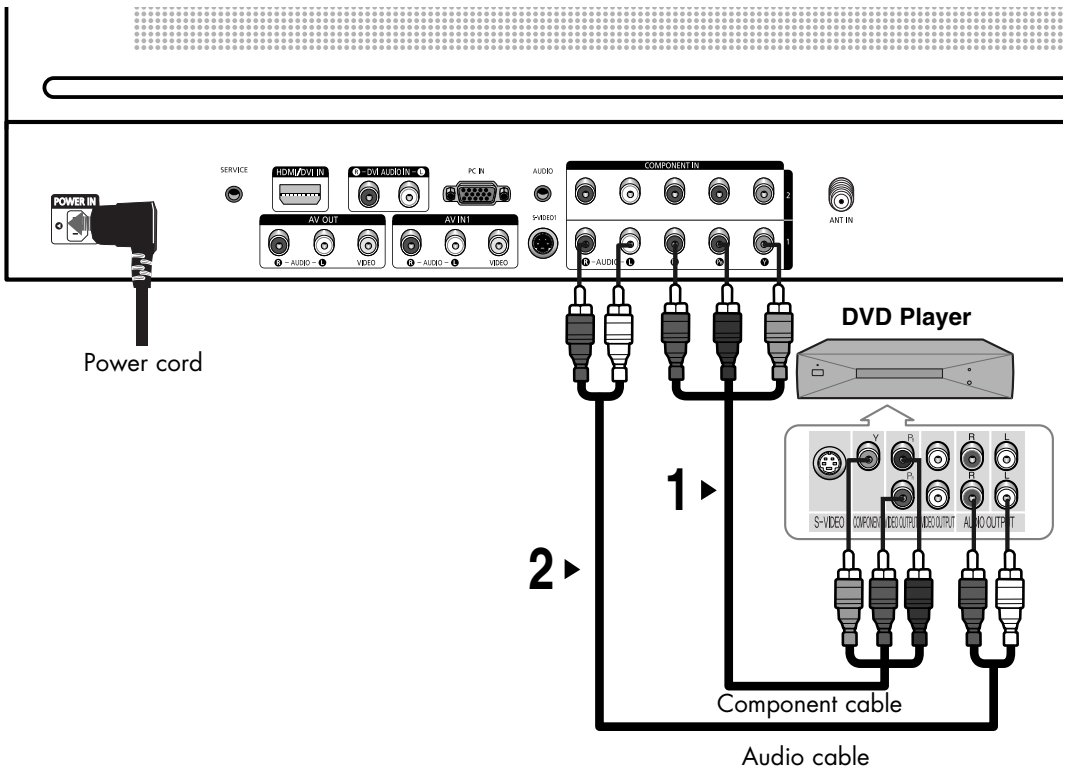
Viewing Tapes

1. Turn on your TV.
2. Press the SOURCE button to select "Video (AV1 or AV2)" or "S-Video (S-Video1 or S-Video2)".
3. Turn on your camcorder and set it to video mode. (For details, refer to your camcorder owner's instructions.)
4. Set the IN/OUT switch on your camcorder to OUT.
5. Insert the tape into the camcorder and press the Play button.

Connecting a DVD Player (480i, 480p)

Playing DVD

TV Rear Panel



How to Connect

1 Connect the Y, P_B, P_R (COMPONENT1, 2) input jacks on the TV to the Y, P_B, P_R output jacks on the DVD player using a component cable.

2 Connect the AUDIO L/R (COMPONENT1, 2) input jacks on the TV to the AUDIO output jacks on the DVD player using a audio cable.

Note

- Please be sure to match the color coded input terminals and cable jacks.

To Play DVD:

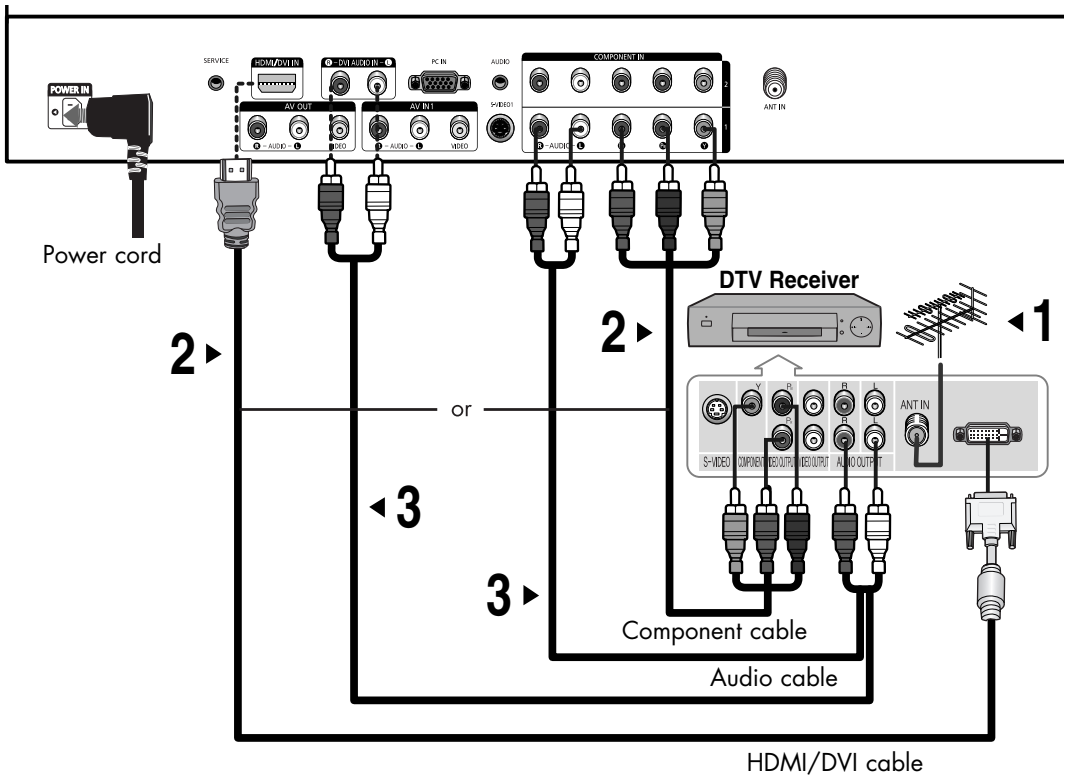
1. Turn on your TV.
2. Press the SOURCE button to select “Component 1” or “Component 2”.
3. Turn on your DVD player, insert a DVD disc and press the Play button.
   - For an explanation of component video, see your DVD player’s owner’s instructions.

Connecting a DTV Receiver (480p, 720p, 1080i)

This TV displays the optimum picture in 720p mode.

Watching DTV

TV Rear Panel



How to Connect

1. Connect the cable or antenna to the antenna input jack on the DTV.
2. Connect the Y, P_B, P_R (COMPONENT1, 2) or HDMI/DVI input jack on the TV to the Y, P_B, P_R or DVI output jacks on the DTV receiver using a component or HDMI/DVI cable.
3. Connect the AUDIO L/R (COMPONENT1, 2 or DVI AUDIO IN) input jacks on the TV with the AUDIO output jacks on the DTV receiver using an audio cable.

Note

- Please be sure to match the color coded input terminals and cable jacks.

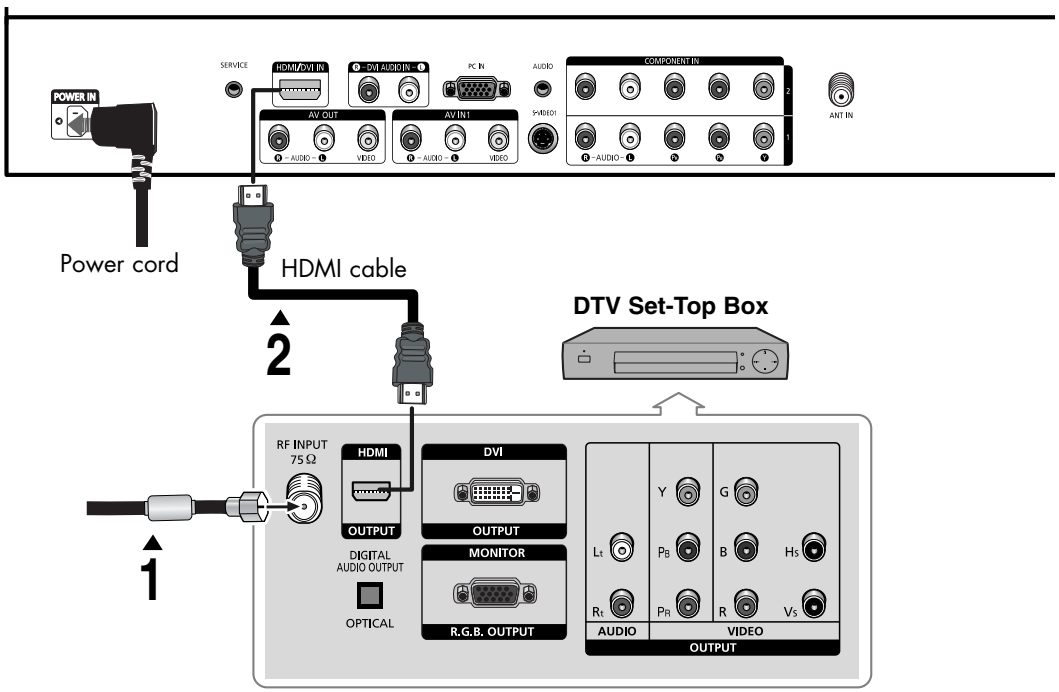
To Watch DTV:

1. Turn on your TV.
2. Turn on your DTV receiver.
   - For an explanation of component video, see your DTV receiver owner's instructions.
3. Press the SOURCE button to select "Component1", "Component2" or "HDMI".

Connecting to HDMI (High Definition Multimedia Interface) (480p, 720p, 1080i)

Watching DTV

TV Rear Panel



How to Connect

1 Connect the cable or antenna to the antenna input jack on the DTV.

2 Connect the HDMI/DVI input jack on the TV with the HDMI output jack on the DTV Set-Top Box using an HDMI cable.

Note

- Please make sure the HDMI source's power is on before selecting HDMI from the "Source List" on the TV.

To Watch DTV:

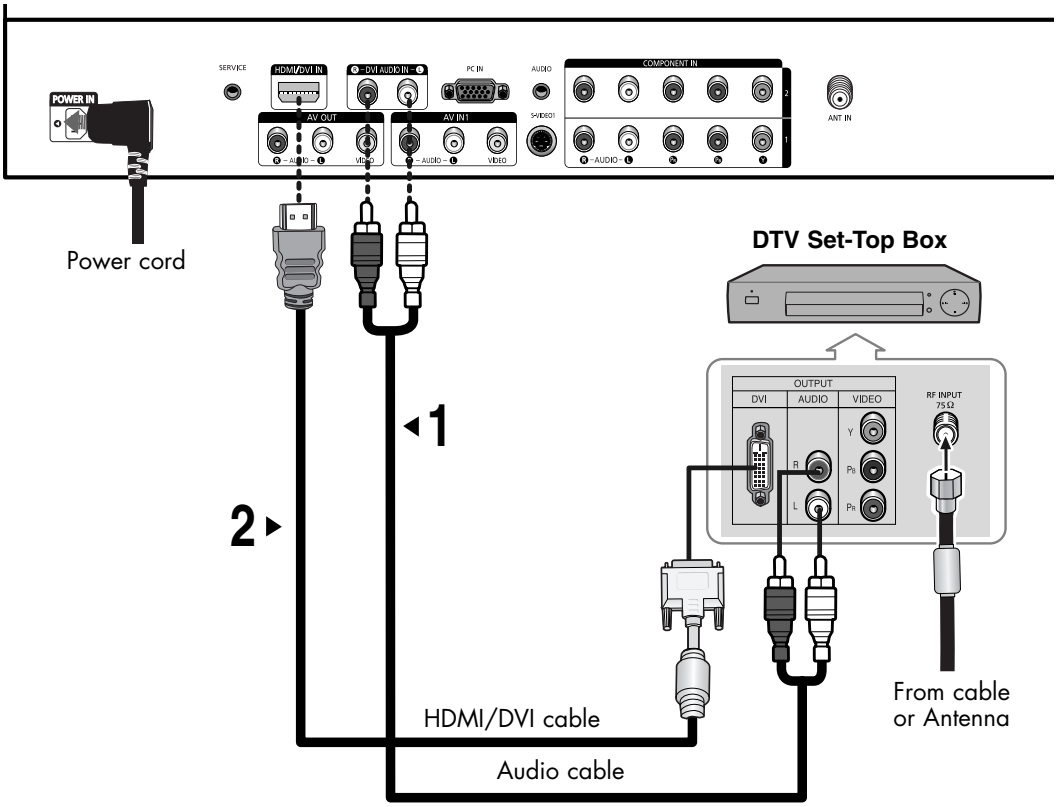
1. Turn on your TV.
2. Turn on your DTV receiver.
   - For an explanation of HDMI video, see your DTV receiver owner's instructions.
3. Press the SOURCE button to select "HDMI".

Connecting a Digital TV Set-Top Box (480p, 720p, 1080i)

By inputting a high-bandwidth digital content protection High-Definition picture source to the HDMI input jack on the TV, High-Definition pictures can be displayed on the screen in their digital form.

Connecting to HDMI (High Definition Multimedia Interface)/DVI Compatible

TV Rear Panel



How to Connect

1 Connect the DVI AUDIO (L, R) input jacks on the TV with the AUDIO output jacks on the Set-Top Box using an audio cable.

Note

- Use analog stereo audio inputs when using the HDMI input with a device that outputs DVI instead of HDMI.

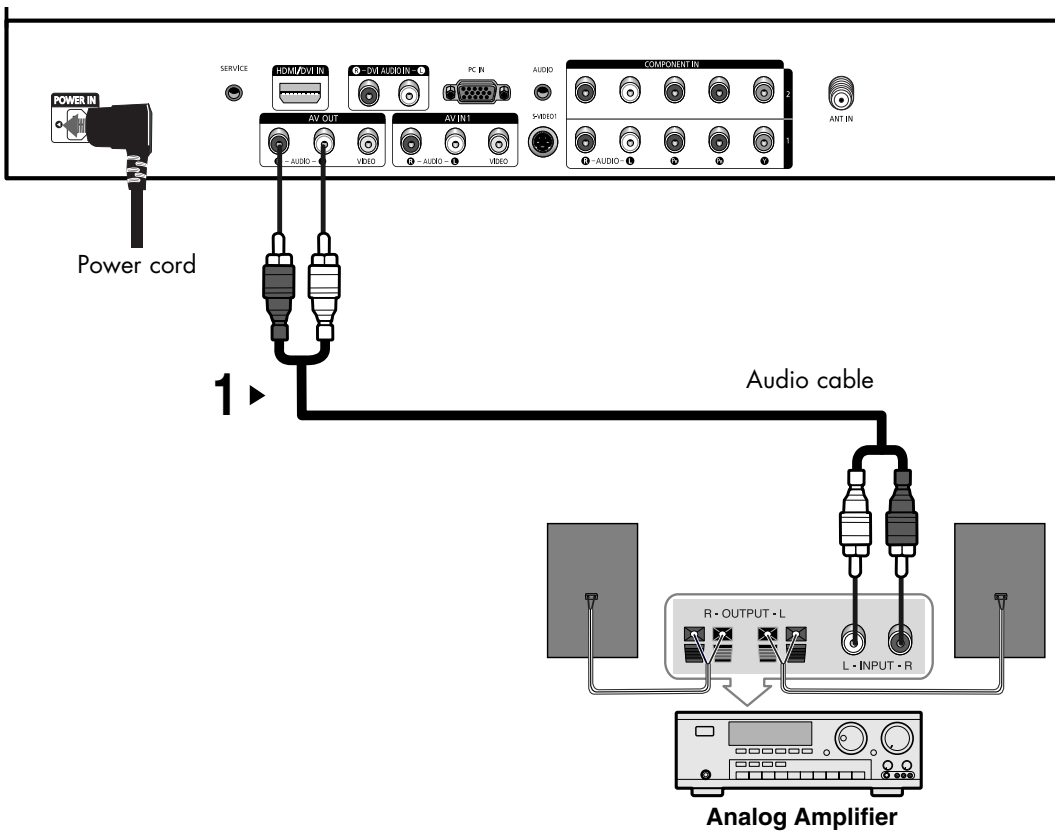
2 Connect the HDMI/DVI input jack on the TV and the DVI output jack on the Set-Top Box using an HDMI/DVI cable.

Note

- The HDMI/DVI IN jack is not compatible with PC.

Connecting to an Analog Amplifier

TV Rear Panel



How to Connect

1 The “AV OUT (AUDIO L/R)” terminals cannot be used for external speakers.
You must hook them up to an amplifier.

When an audio amplifier is connected to the “AV OUT (AUDIO L/R)” terminals:
Decrease the gain (volume) of the TV, and adjust the volume level with the Amplifier’s volume control.

SAMSUNG

PLASMA DISPLAY PANEL

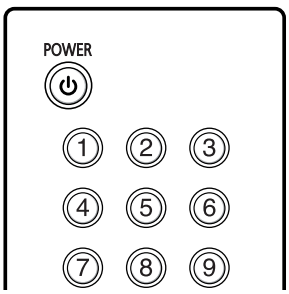
Operation

Turning the TV On and Off.....32
Plug & Play Feature 34
Memorizing the Channels 37
Adding and Erasing Channels 39
Viewing an External Signal Source 41

Turning the TV On and Off

Turning the TV On and Off

Press the POWER button on the remote control.
The TV will be turned on and you will be able to use its features.
You can also use the Power button on the front of the TV.



Viewing the Menus and Displays

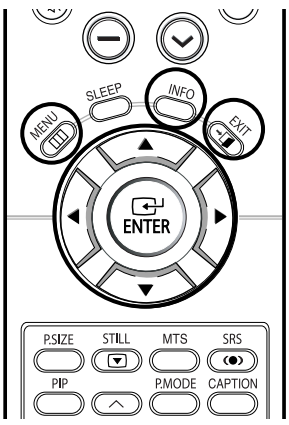
Your TV has a simple, easy-to-use menu system that appears on the TV screen.
This system makes it convenient and fast to use features on the TV.
Your TV also lets you display the status of many of your TV's features.

Viewing the Menus

1 With the power on, press the MENU button on the remote control. The main menu appears on the screen. The Input menu is selected.

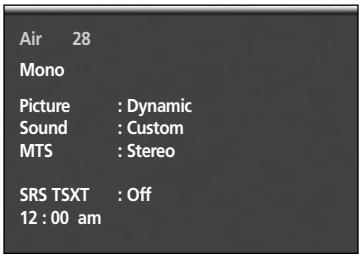
2 Press the ▲ or ▼ button to move to items in the menu. Press the ◄/►/ENTER buttons to display, change, or use the selected items.

Press the ENTER button to enter items in the menu. On screen menus disappear from the screen automatically after about two minutes or you can press the EXIT button on your remote control to exit the menu.



Displaying Status Information

Press the INFO button on the remote control.
The TV will display the Picture mode, Sound mode, MTS, SRS TSXT, and Current Time.



Note

- The INFO window automatically disappears after a few seconds. Press the INFO button once to manually close the window.

Plug & Play Feature

When the TV is initially powered On, basic customer settings proceed automatically and subsequently: Setting the language, checking the antenna input, memorizing the channels, and setting the time.

Note

- The Plug & Play function operates after plugging in the TV for the first time.

1 If the television is in Standby mode, press the POWER button on the remote control.
The message Start Plug & Play is displayed.
Press the ENTER button to select OK.
The Language menu is displayed.

Note

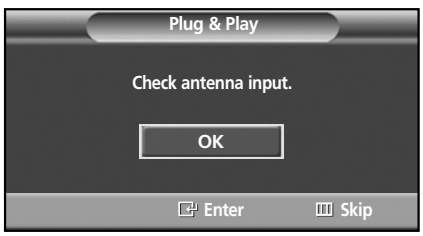
- The Language menu will automatically appear after several seconds, even if the ENTER button is not pressed.

2 Select the appropriate language by pressing the ▲ or ▼ button.
Press the ENTER button to confirm your choice.
The message Check antenna input is displayed.

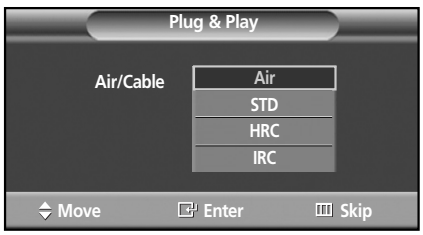
Note

- The message Check antenna input will automatically appear after several seconds, even if the ENTER button is not pressed.

3 Press the ENTER button to select OK.
The menu to select signal source is displayed.



4 Select the correct signal source (Air, STD, HRC and IRC) by pressing the ▲ or ▼ button, then press the ENTER button.

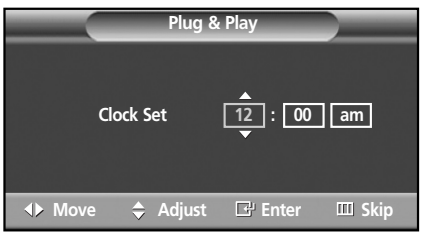


5 To start the channel search, press the ENTER button.

Notes

- The search will end automatically. Channels are sorted and stored in an order which reflects their position in the frequency range (with lowest first and highest last).
  When it has finished, the Clock Set menu is displayed.
- To stop the search before it has finished or return to normal viewing, press the MENU button.

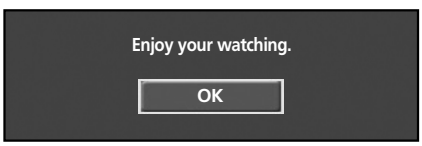
6 Press the ENTER button.
Press the ◄ or ► button to move to the hour, minute, or am/pm.
Set the Hour, Minute, or am/pm by pressing the ▲ or ▼ button.
Press the ENTER button.



Note

- You can set the Hour and Minute directly by pressing the number buttons on the remote control.

7 When it has finished, the message “Enjoy your watching” is displayed, and the channels which have been stored can be viewed.



To reset this feature....

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.

2 Press the ENTER button to select "Plug & Play".

3 For further details on setting up options, refer to the previous page.

Note

- Plug and Play can only be accessed in the TV mode.

Memorizing the Channels

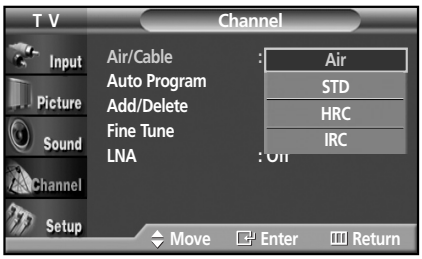
Your TV can memorize and store all of the available channels for both "off-air" (antenna) and cable channels. After the available channels are memorized, use the CH ∧ and CH ∨ buttons to scan through the channels. This eliminates the need to change channels by entering the channel digits. There are three steps for memorizing channels: selecting a broadcast source, memorizing the channels (automatic) and adding and deleting channels (manual).

Selecting a broadcast source

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the TV (i.e., an air or a cable system).

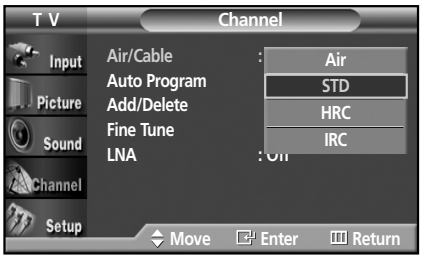
1 Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.

2 Press the ENTER button to select "Air/Cable".



3 Press the ▲ or ▼ button to select "Air", "STD", "HRC" or "IRC", then press the ENTER button.

- If you are using an Air antenna, leave "Air" displayed. If you are using a cable antenna, press the ▲ or ▼ button to display the type of cable system: "STD", "HRC" or "IRC". (If you are not sure which type of cable system you have, contact your cable company).



4 Press the EXIT button to exit.

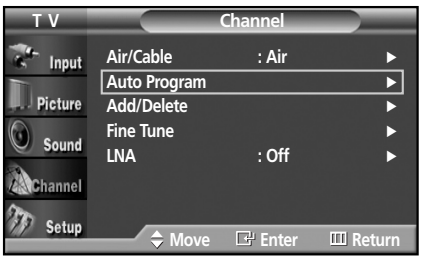
Note

- STD, HRC and IRC identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area. At this point the signal source has been selected. Proceed to "Storing Channels in Memory" (Next page).

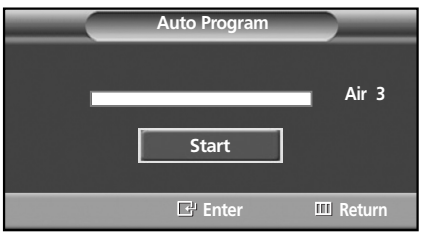
Storing Channels in Memory

1 First, select the correct signal source (Air, STD, HRC and IRC). See steps on previous page.
Press the MENU button. Press the ▲ or ▼ button to select “Channel”, then press the ENTER button.

2 Press the ▲ or ▼ button to select “Auto Program”, then press the ENTER button.



3 Press the ENTER button.
The TV will begin memorizing all of the available channels.
After all the available channels are stored, the Auto program menu reappears.
Press the ENTER button to stop.



4 Press the EXIT button to exit.

Notes

- All available analog channels are automatically stored in memory.
- It takes approximately 3 to 10 minutes to memorize channels.

Adding and Erasing Channels

To add channels that were not memorized (or to delete unwanted channels from memory):

1 Press the MENU button.
Press the ▲ or ▼ button to select “Channel”, then press the ENTER button.

2 Press the ▲ or ▼ button to select “Add/Delete”, then press the ENTER button.

3 Repeatedly pressing the ENTER button will alternate between add channel and delete channel.

Press the CH ^ or CH v button to switch to the appropriate channel, then repeat above.
Press the EXIT button to exit.

Changing Channels

Using the Channel Buttons

Press the CH ^ or CH v button to change channels.

When you press the CH ^ or CH v button, the TV changes channels in sequence. You will see all the channels that the TV has memorized. (The TV must have memorized at least three channels.)
You will not see channels that were either erased or not memorized.

Directly Accessing Channels

Press the number buttons to go directly to a channel. For example, to select channel 27, press "2" then "7".

When you use the number buttons, you can directly select channels that were either erased or not memorized. To select a channel over 100, press the +100 button. (For channel "112", press the +100 button, then "1", then "2". To change to single-digit channels (0~9) faster, press "0" before the single digit. (For channel "4" press "0", then "4").

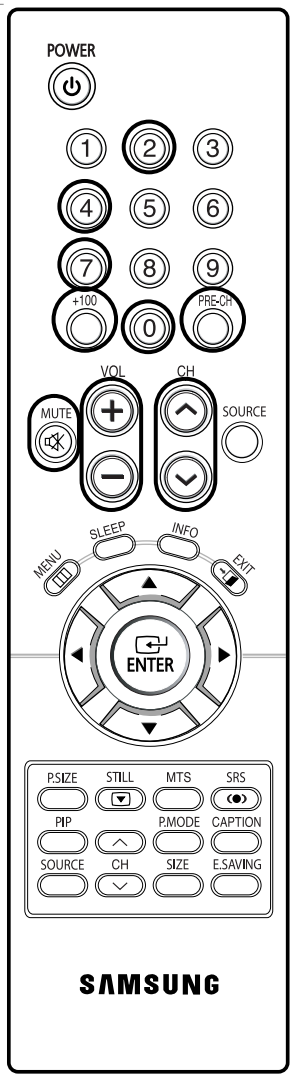
Note

- For quick channel change, press the number buttons and, then press ENTER button.

Using the PRE-CH button to select the previous channel

Press the PRE-CH button. The TV will switch to the last channel viewed.

To quickly switch between two channels that are far apart, tune to one channel, then use the number button to select the second channel. Then, use the PRE-CH button to quickly alternate between them.



Adjusting the Volume

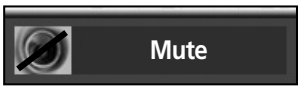
Using the Volume Buttons

Press the VOL + or VOL — button to increase or decrease the volume.

Using Mute

Using the MUTE Button

At any time, you can temporarily cut off the sound using the MUTE button.



1. Press the MUTE button and the sound cuts off. The word "Mute" will appear in the lower-left corner of the screen.

2. To turn mute off, press the MUTE button again, or simply press the VOL + or VOL — button.

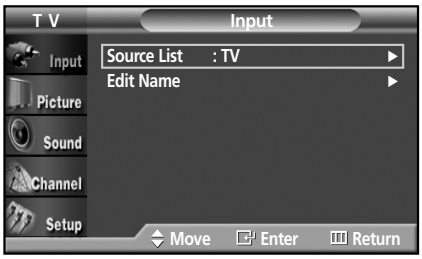
Viewing an External Signal Source

Use the remote control to switch between viewing signals from connected equipment, such as VCR, DVD, Set-Top Box, and the TV source (air or cable).

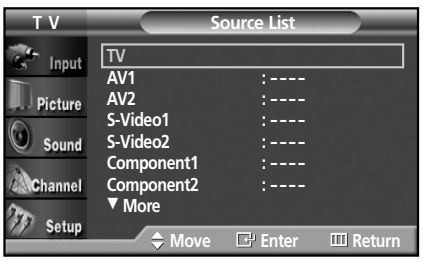
Setting the Signal Source

1 Press the MENU button.
Press the ENTER button to select “Input”.

➢ Quick way to access viewing an external signal source :
Just press “SOURCE” button on the remote control.



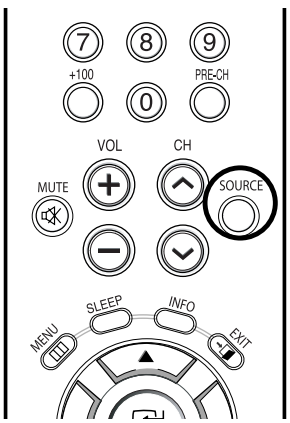
2 Press the ENTER button to select “Source List”.



3 Press the ▲ or ▼ button to select signal source, then press the ENTER button.

Note
- Only connected devices can be selected.

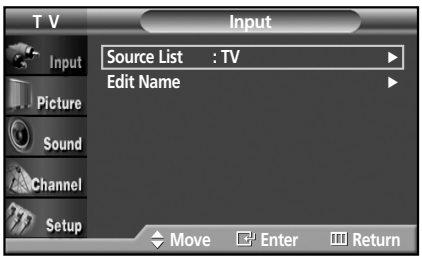
4 Press the EXIT button to exit.



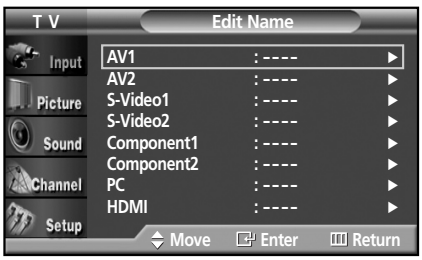
Notes
- When you connect equipment to the TV, you can choose between the following sets of jacks: AV1, S-VIDEO1, COMPONENT 1, COMPONENT 2, PC, or HDMI on the TV’s rear panel and AV2 or S-VIDEO2 on the TV’s side panel.
- HDMI input can only be selected when the external device is turned on and connected via HDMI.

Assigning Names to External input mode

1 Press the MENU button.
Press the ENTER button to select “Input”.

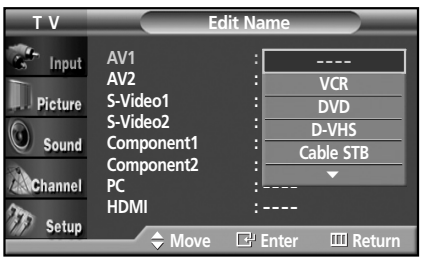


2 Press the ▲ or ▼ button to select “Edit Name”, then press the ENTER button.



3 Press the ENTER button.
Press the ▲ or ▼ button to select external device, then press the ENTER button.

- You can select the VCR, DVD, D-VHS, Cable STB, HD STB, Satellite STB, AV Receiver, DVD Receiver, Game, Camcorder, DVD Combo, DHR, or PC.
- Set other signal sources (AV2, S-Video1, S-Video2, Component1, Component2, PC, or HDMI) using the same method as listed above.

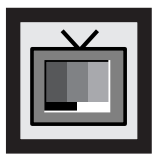


4 Press the EXIT button to exit.

SAMSUNG

PLASMA DISPLAY PANEL

Picture Control



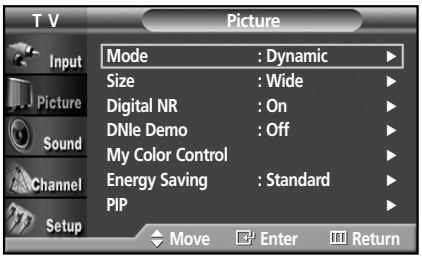
Changing the Picture Standard 44
Customizing the Picture Settings 45
Viewing the DNIe Demonstration 47
Changing the Screen Size 48
Viewing the Picture-in-Picture.....50
Setting the My Color Control Mode.....56

Changing the Picture Standard

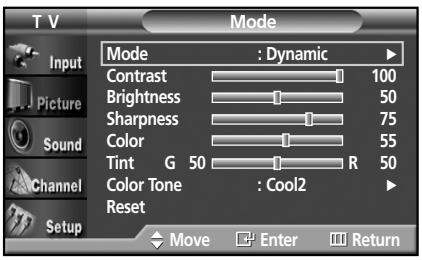
You can select the type of picture which best corresponds to your viewing requirements.

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

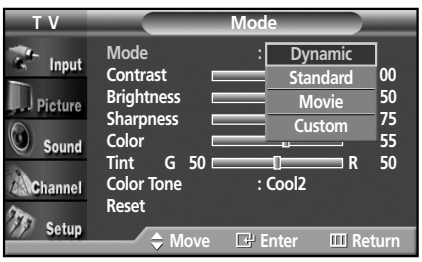
➢ **Quick way to access the picture setting: Just press "P.MODE" button on the remote control.**



2 Press the ENTER button again to select "Mode".

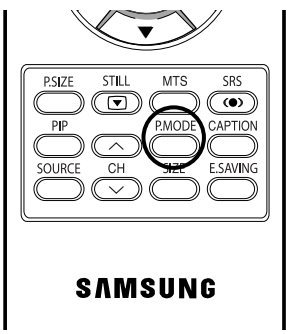


3 Press the ENTER button.
Press the ▲ or ▼ button to select the desired picture mode (Dynamic, Standard, Movie, Custom), then press the ENTER button.



4 Press the EXIT button to exit.

- Choose Dynamic for viewing the TV during the day or when there is bright light in the room.
- Choose Standard for the standard factory settings.
- Choose Movie when viewing the movie.
- Choose Custom if you want to adjust the settings according to personal preference
  (see "Customizing the Picture Settings", page 45).

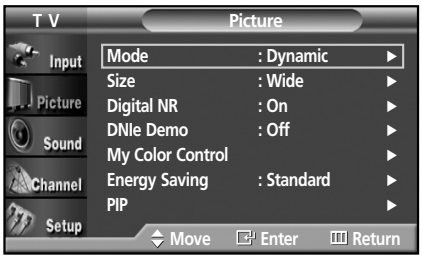


Customizing the Picture Settings

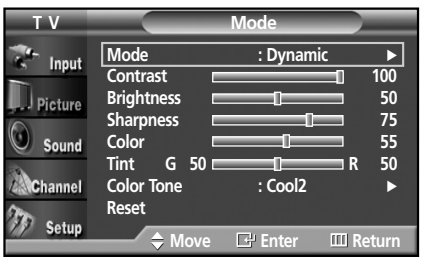
You can use the on-screen menus to change the “Contrast”, “Brightness”, “Sharpness”, “Color”, “Tint”, and “Color Tone” according to personal preference. You can select “Standard” which automatically recalls your personalized picture settings.

1 Press the MENU button. Press the ▲ or ▼ button to select “Picture”, then press the ENTER button.

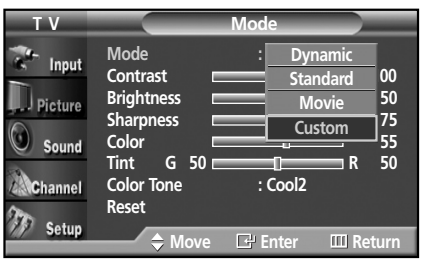
➢ **Quick way to access the picture setting: Just press “P.MODE” button on the remote control.**



2 Press the ENTER button again to select “Mode”.



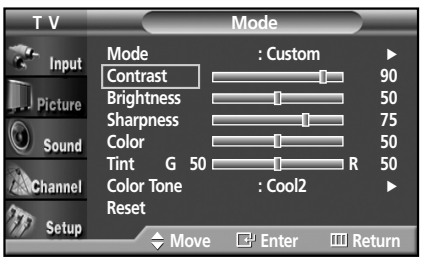
3 Press the ENTER button.
Press the ▲ or ▼ button to select the desired picture mode (Dynamic, Standard, Movie, Custom), then press the ENTER button.



4 Press the ▲ or ▼ button to select a particular option (Contrast, Brightness, Sharpness, Color, or Tint), then press the ENTER button.

Press the ◄ or ► button to decrease or increase the value of a particular item.

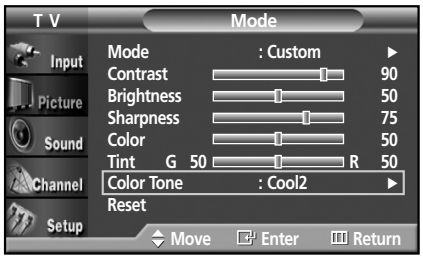
- You can also select these options (Contrast, Brightness, Sharpness, Color, or Tint) by pressing the ▲ or ▼ button.



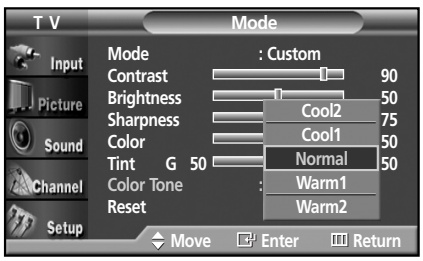
Notes

- “Tint” doesn’t operate in PC, HDMI or any Component mode.
- The Tint cannot be adjusted while watching Digital TV.

5 Press the ENTER button to return to “Mode”.
Press the ▲ or ▼ button to select “Color Tone”, then press the ENTER button.



6 Press the ▲ or ▼ button to select a particular option (Cool2, Cool1, Normal, Warm1, or Warm2), then press the ENTER button.

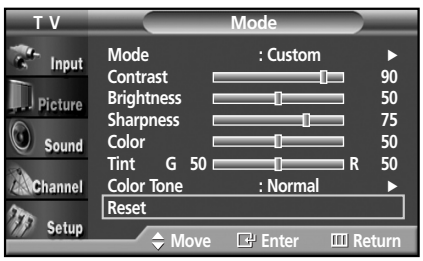


Resetting the Picture Settings to the Factory Defaults

7 To return the factory defaults, select “Reset” by pressing the ▲ or ▼ button.
Press the ENTER button.

- The previously adjusted settings will be reset to the factory defaults.

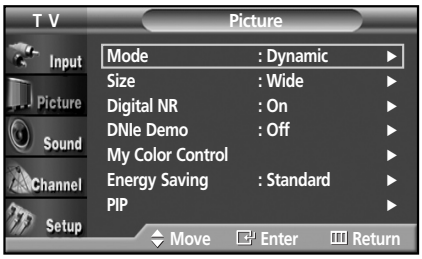
Press the EXIT button to exit.



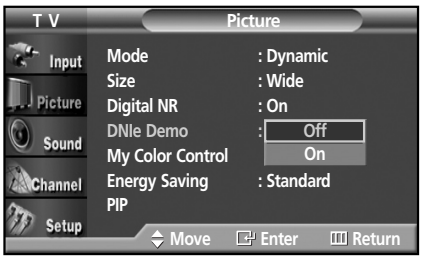
Viewing the DNIe Demonstration

This TV includes the DNIe function so as to provide a high visual quality.
If you set DNIe Demo to On, you can view the applied DNIe and normal pictures on the screen, for demonstration purposes. Using this function, you can view the difference in the visual quality.

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

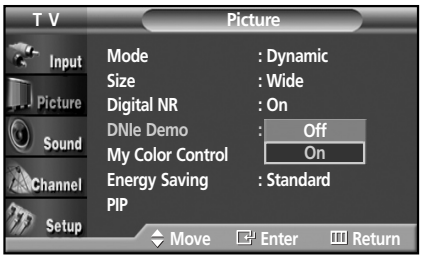


2 Press the ▲ or ▼ button to select "DNIe Demo", then press the ENTER button.

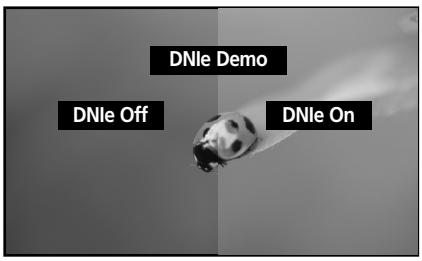


3 Press the ▲ or ▼ button to select "Off" or "On", then press the ENTER button.

- Off : Switches off the DNIe Demo mode.
- On : Switches on the DNIe Demo mode.



4 Press the EXIT button to exit.



Note

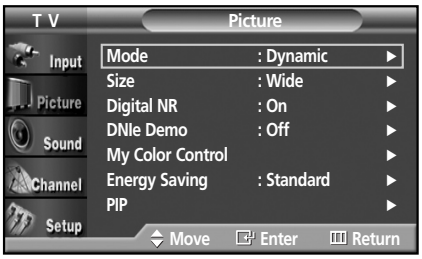
- DNIe™ (Digital Natural Image engine) DNIe™
  This feature brings you more a detailed image with 3D noise reduction and detail, contrast and white enhancement.

Changing the Screen Size

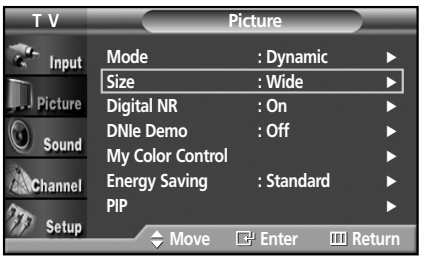
Screen size selection depends on the type of video input.

1 Press the MENU button. Press the ▲ or ▼ button to select “Picture”, then press the ENTER button.

➢ **Quick way to change the Screen size: Just press P.SIZE button on the remote control.**



2 Press the ▲ or ▼ button to select “Size”, then press the ENTER button.

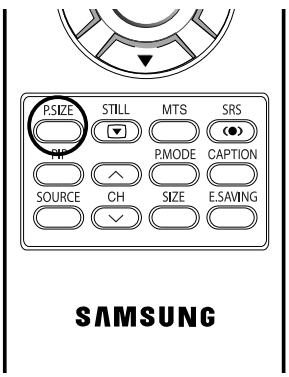


3 Press the ▲ or ▼ button to select the screen size you want, then press the ENTER button.

4 Press the EXIT button to exit.

Notes

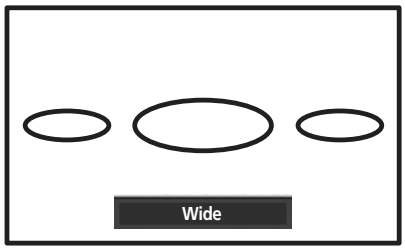
- If you watch a still image or the 4:3 (Normal) mode for a long time (over 2 hours), an image may be burned onto the screen.
- View the TV in Wide (16:9) mode as much as possible.
- Wide : Sets the picture to 16:9 wide mode.
- Wide 4:3 : Magnify the size of the picture more than 4:3. Move the screen up/down using the ▲ or ▼ button after selecting the by pressing the ▶ or ENTER button.
- Zoom : Magnifies the size of the picture on the screen. (For more information, refer to the following page.)
- 4:3 : Sets the picture to 4:3 normal mode.



When you press the P.SIZE button on the remote control, the TV's screen mode should appear in sequence. The screen displays in this order: Wide, Wide 4:3, Zoom, 4:3.

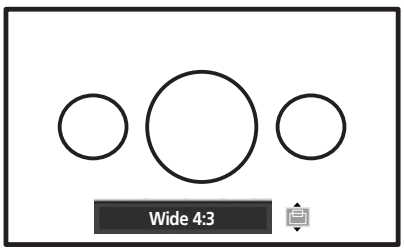
Wide

Sets the picture to 16:9 wide mode.



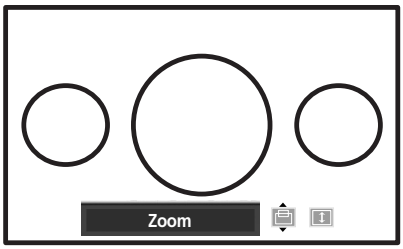
Wide 4:3

Magnify the size of the picture more than 4:3.



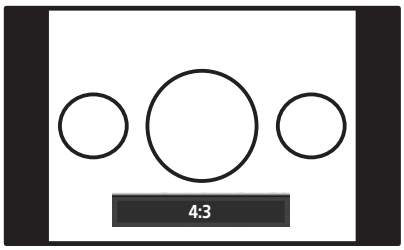
Zoom

Magnifies the size of the picture on the screen.



4:3

Sets the picture to 4:3 normal mode.



Positioning and Sizing the screen using Zoom

- Resizing the screen using the Zoom enables the positioning and sizing of the screen to up/down direction using the ▲ or ▼ button as well as the screen size.
- Move the screen up/down using the ▲ or ▼ button after selecting the by pressing the ◄ or ► button.
- Resize the screen vertically using the ▲ or ▼ button after selecting the by pressing the ◄ or ► button. (Pressing the ▲ button extends it upward and pressing the ▼ button extends it downward.)
- Screen enlargement operates only in TV/ Video/S-Video/Component input modes.
- PC/HDMI mode prevent the screen enlargement function.

Notes

- In TV, VIDEO, S-VIDEO, and COMPONENT(480i, 480p) modes, all screen modes can be selected. (Wide → Wide 4:3 → Zoom → 4:3).
- In COMPONENT(720p, 1080i), PC, HDMI modes, only Wide & 4:3 modes can be selected.
- If you change the picture size when PIP is On, PIP will automatically be turned Off.

Viewing the Picture-in-Picture

Selecting the PIP Screen

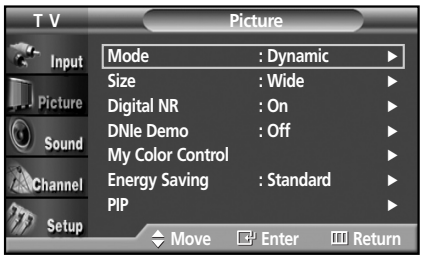
1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

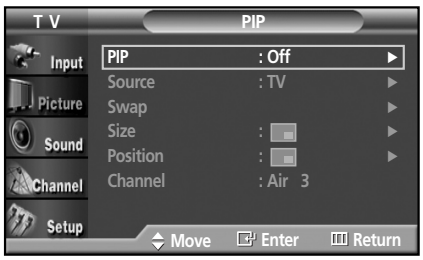
➢ Quick way to access the PIP mode: Just press "PIP" button on the remote control.

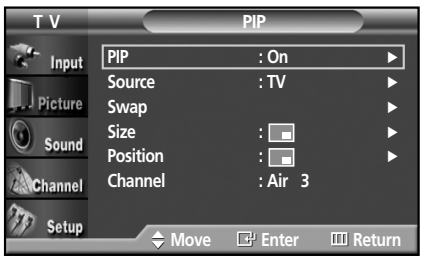
2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.

3 Press the ENTER button, then press the ▲ or ▼ button to select "On". The PIP image will appear in the corner of the screen.
- Pressing the ▲ or ▼ button will alternate between "On" and "Off".

4 Press the EXIT button to exit.







PIP Settings

O : PIP and swap operate
X : PIP doesn't operate

Main screen / PIP screen	TV	AV1	AV2	S-Video1	S-Video2	Component1	Component2	PC	HDMI
TV	X	O	O	O	O	O	O	O	O
AV1	O	X	O	O	O	O	O	O	O
AV2	O	O	X	O	O	O	O	O	O
S-Video1	O	O	O	X	O	O	O	O	O
S-Video2	O	O	O	O	X	O	O	O	O
Component1	X	X	X	X	X	X	X	X	X
Component2	X	X	X	X	X	X	X	X	X
PC	X	X	X	X	X	X	X	X	X
HDMI	X	X	X	X	X	X	X	X	X

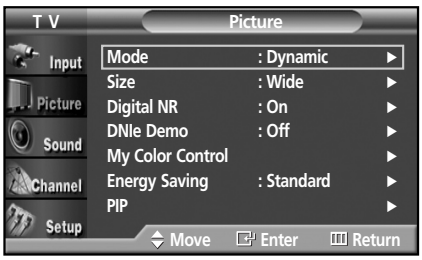
Note
- This TV has only one tuner and does not allow you to watch one TV channel in the main screen and another channel in the PIP screen.

Selecting an External Signal

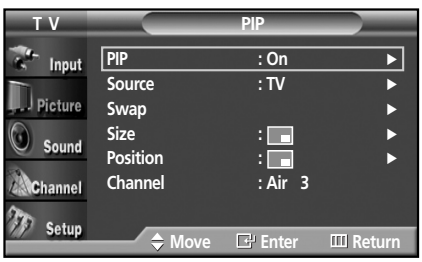
You can use PIP to view a signal from an external source, such as a VCR.

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

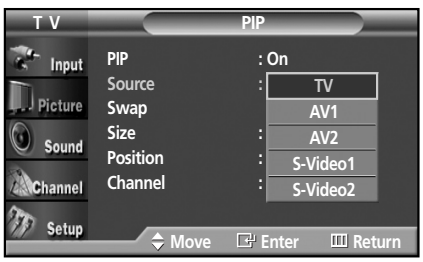
➢ Quick way to access the PIP source: Just press "Source" button on the remote control.



2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.



3 Press the ▲ or ▼ button to select "Source", then press the ENTER button.



4 Press the ▲ or ▼ button to cycle through all of the available signal sources: "TV", "AV1", "AV2", "S-Video1", or "S-Video2".

Note

- The signal from these inputs will not appear if you have not connected any equipment to the TV's respective input jacks.

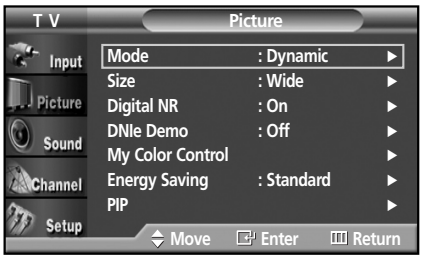
5 Press the EXIT button to exit.

Notes

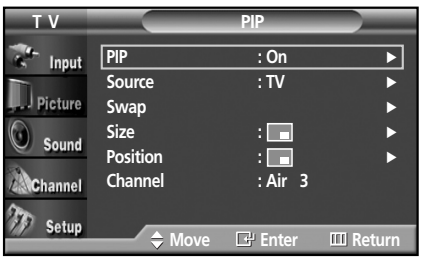
- The same source cannot be selected on both the main and sub screens.
- Component1, Component2, PC, or HDMI is not available in PIP picture.

Swapping the Contents of the PIP and Main Image

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

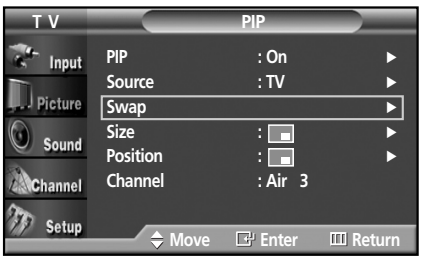


2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.



3 Press the ▲ or ▼ button to select "Swap", then press the ENTER button.

- The image in the PIP window will appear on the main screen, and vice versa. (Refer to page 50)



Note

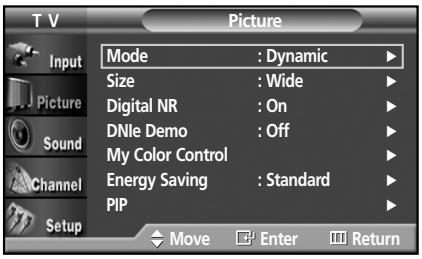
- If main picture is in PC, Component1, Component2, or HDMI mode, Swap is not available.

4 Press the EXIT button to exit.

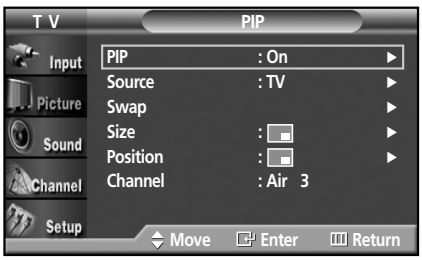
Changing the Size of the PIP Window

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

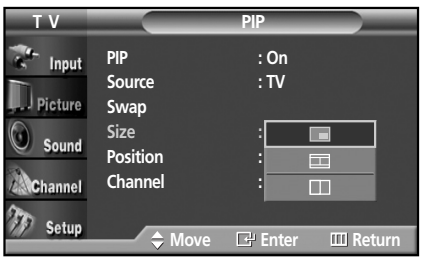
➢ Quick way to change the size of the PIP window : Just press "SIZE" button on the remote control.



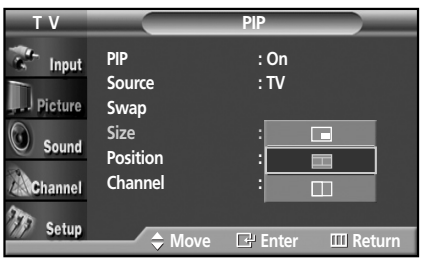
2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.



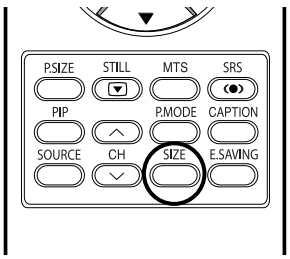
3 Press the ▲ or ▼ button to select "Size", then press the ENTER button.



4 Press the ▲ or ▼ button to select option you want, then press the ENTER button.



5 Press the EXIT button to exit.

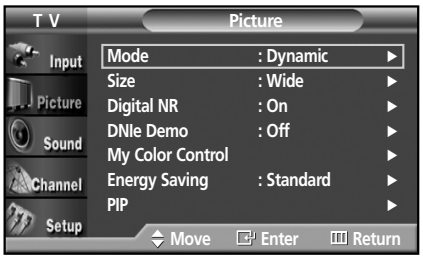


Note

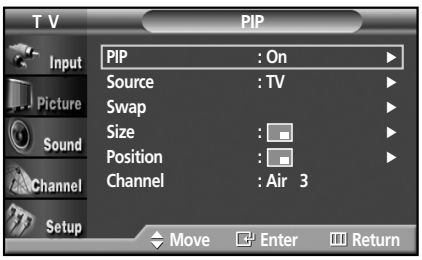
- If main picture is in PC, HDMI mode, Size is not available.

Changing the Location of the PIP Image

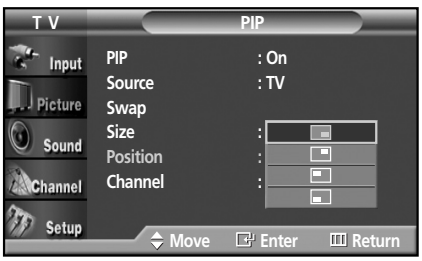
1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



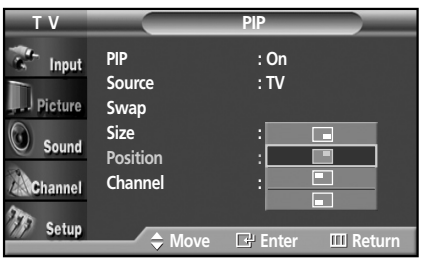
2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.



3 Press the ▲ or ▼ button to select "Position", then press the ENTER button.



4 Press the ▲ or ▼ button to select the PIP position you want, then press the ENTER button.



5 Press the EXIT button to exit.

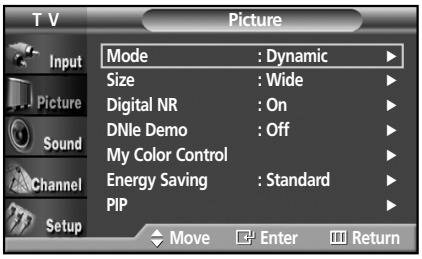
Note

- In Double Window ( ) and Double Wide ( ) modes, Position cannot be selected.

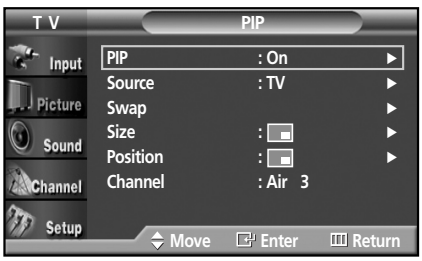
Changing the PIP Channel

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

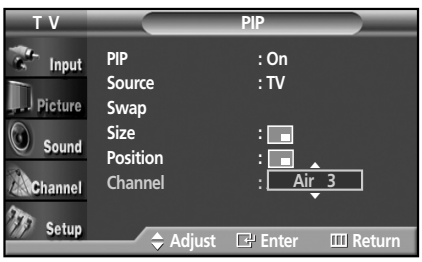
➢ **Quick way to change the PIP channel: Just press "CH ⌃ " or "CH ⌄ " button on the remote control.**



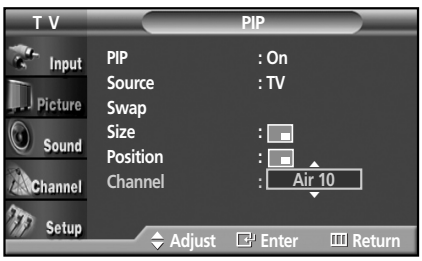
2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.



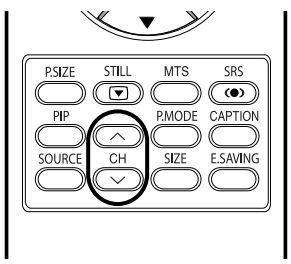
3 Press the ▲ or ▼ button to select "Channel", then press the ENTER button.



4 Press the ▲ or ▼ button to change the channel that appears in the PIP window.



5 Press the EXIT button to exit.



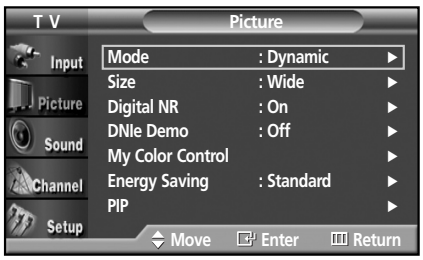
Setting the My Color Control Mode

My Color Control allows you to adjust colors according to your preference, by adjusting skin, sky, and grass tones using the predefined settings (Standard, Custom, Blue, Green, Pink) without affecting other colors on the screen.

Using the My Color Control Function in the Easy Control Menu

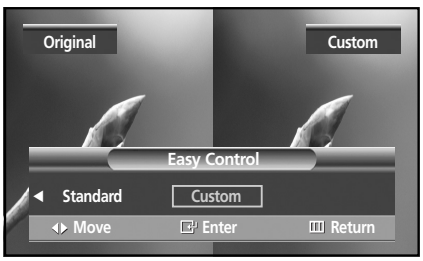
Skin, sky and grass tones are easily adjustable to suit your preferences.

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



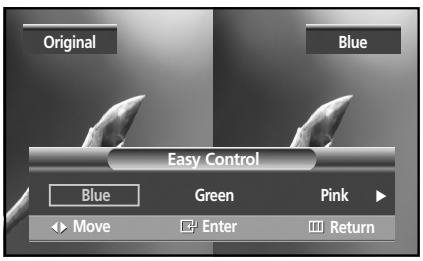
2 Press the ▲ or ▼ button to select "My Color Control", then press the ENTER button.

3 Press the ENTER button to select "Easy Control".



4 Press the ◄ or ► button to select the setting among the various picture settings. The original picture (before adjustment) is shown on the left side, while the selected mode is shown on the right side.

➢ There are five My Color Control modes: Standard, Custom, Blue, Green, Pink.



5 Press the EXIT button to exit.

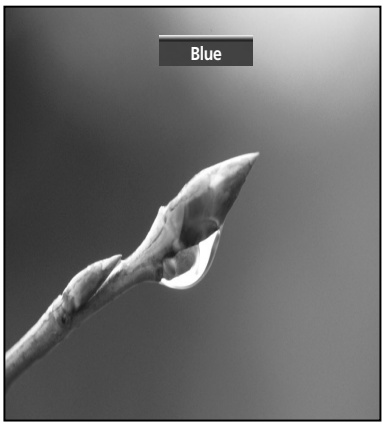
Note

- The My Color Control is not available in PC mode.

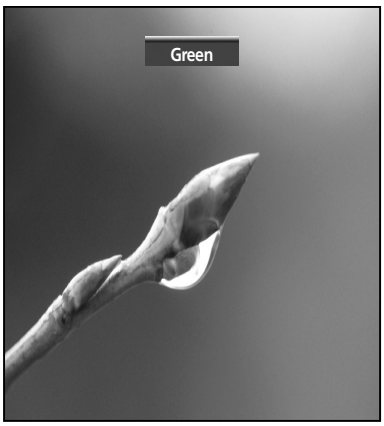
My Color Control Mode Characteristics

Using My Color Control mode, you can enjoy vivid colors as shown below.

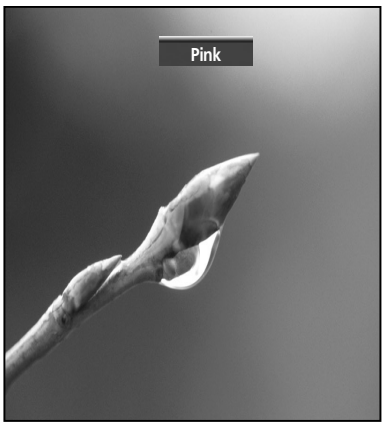
➤ Standard Picture.



➤ Emphasizes Clear Blues.



➤ Emphasizes Mild Greens.



➤ Emphasizes Warm Skin Colors.

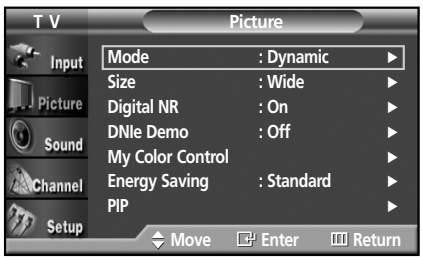
Note

- The current image will be displayed on the screen.

My Color Control Custom Settings

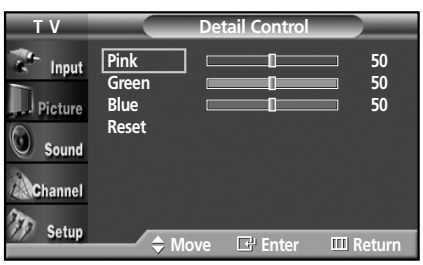
Users can adjust the 3 My Color Control colors (Pink, Green, and Blue).

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

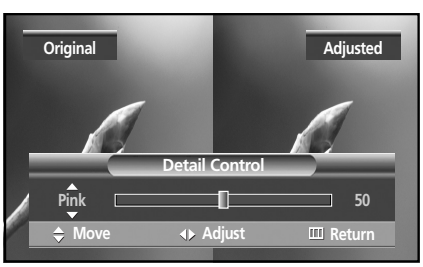


2 Press the ▲ or ▼ button to select "My Color Control", then press the ENTER button.

3 Press the ▲ or ▼ button to select "Detail Control", then press the ENTER button.



4 Press the ▲ or ▼ button to select the desired color and then press the ENTER or ► button.



5 Press the ◄ or ► button to adjust the settings.

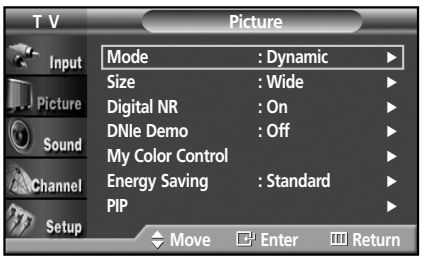
- Press the ▲ or ▼ button to select other colors.

6 Press the ENTER or MENU button to confirm the changes and return to the previous menu.

Resetting the My Color Control Colors to the Factory Defaults

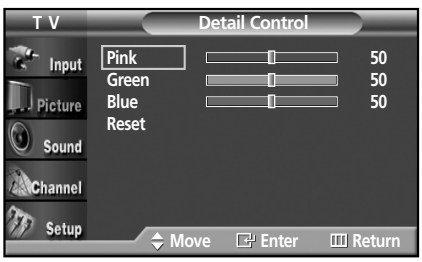
To return to the factory default settings for My Color Control colors, use the Reset function.

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

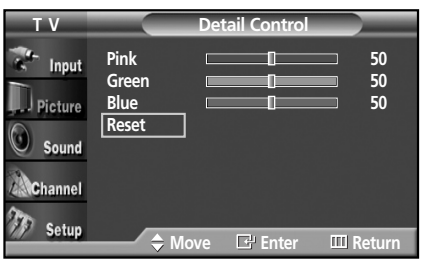


2 Press the ▲ or ▼ button to select "My Color Control", then press the ENTER button.

3 Press the ▲ or ▼ button to select "Detail Control", then press the ENTER button.



4 Press the ▲ or ▼ button to select "Reset" and press the ENTER button.



5 The previously adjusted My Color Control Colors will be reset to the factory defaults.

6 Press the EXIT button to exit.

SAMSUNG

PLASMA DISPLAY PANEL

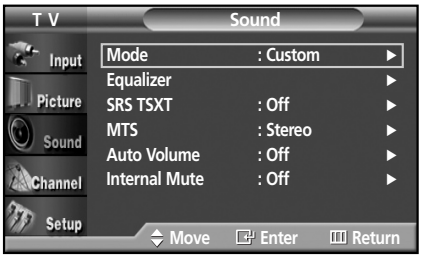
Sound Control

Customizing the Sound 62
Using Automatic Sound Settings 63
Setting the TruSurround XT 64
Choosing a Multi-Channel Sound (MTS) track.....65
Using the Auto Volume.....66
Setting the On/Off Melody 67
Selecting the Internal Mute 68

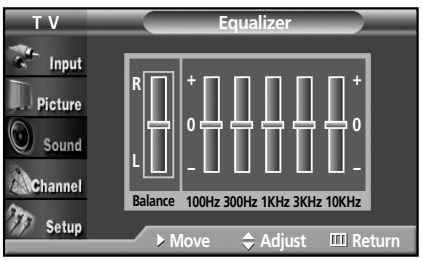
Customizing the Sound

The sound settings can be adjusted to suit your personal preferences.
(Alternatively, you can use one of the "automatic" settings. See next page.)

1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.



2 Press the ▲ or ▼ button to select "Equalizer", then press the ENTER button.



3 Press the ◄ or ► button to select a particular frequency to adjust. Press the ▲ or ▼ button to increase or decrease the level of the particular frequency.

4 Press the EXIT button to exit.

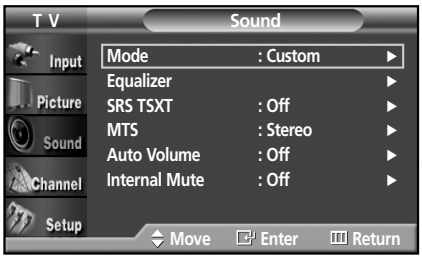
Notes

- If you make any changes to the equalizer settings, the sound mode is automatically switched to the custom mode.
- **L/R Sound Balance Adjustment**
  To adjust the sound balance of the L/R speakers.
- **Bandwidth Adjustment (100Hz, 300Hz, 1KHz, 3KHz, 10KHz)**
  To adjust the level of different bandwidth frequencies.

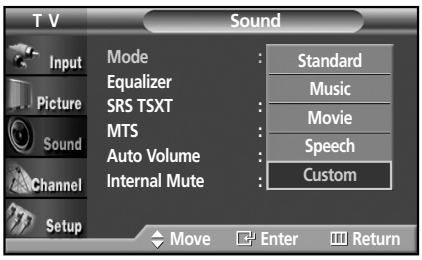
Using Automatic Sound Settings

Your TV has automatic sound settings ("Standard", "Music", "Movie", and "Speech") that are preset at the factory. Or, you can select "Custom," which automatically recalls your personalized sound settings.

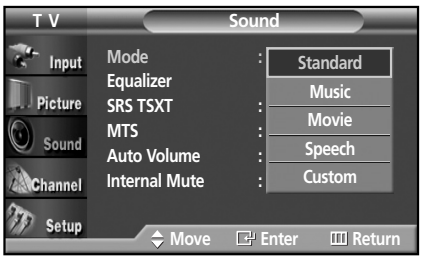
1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.



2 Press the ENTER button to select "Mode".



3 Press the ▲ or ▼ button to select "Standard", "Music", "Movie", "Speech", or "Custom" sound setting, then press the ENTER button.



4 Press the EXIT button to exit.

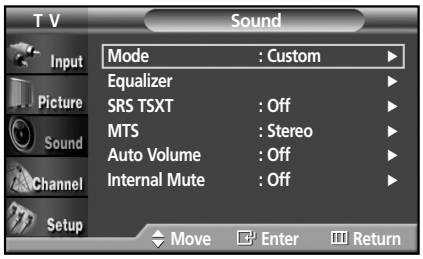
- Choose Standard for the standard factory settings.
- Choose Music when watching music videos or concerts.
- Choose Movie when watching movies.
- Choose Speech when watching a show that is mostly dialog (i.e., news).
- Choose Custom to recall your personalized settings (see "Customizing the Sound", page 62).

Setting the TruSurround XT

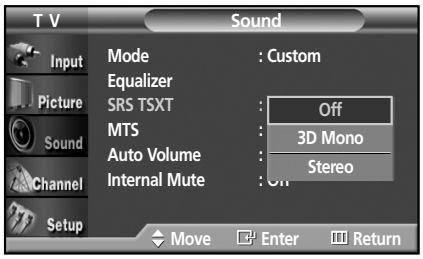
TruSurround XT is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. TruSurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.

1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.

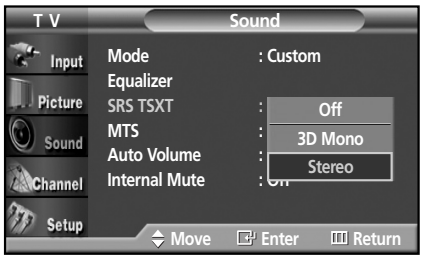
➢ **Quick way to access the SRS TSXT menu: Just press "SRS" button on the remote control repeatedly to select one of the settings.**



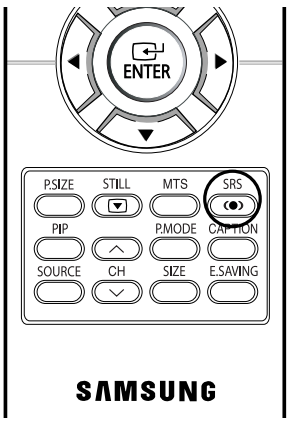
2 Press the ▲ or ▼ button to select "SRS TSXT", then press the ENTER button.



3 Press the ▲ or ▼ button to change the setting (Off, 3D Mono, or Stereo), then press the ENTER button.



4 Press the EXIT button to exit.



TruSurround XT, SRS and (●) Symbol are trademarks of SRS Labs, Inc.
TruSurround XT technology is incorporated under license from SRS Labs, Inc.

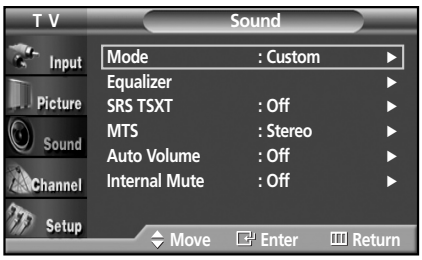
SRS(●) TruSurround XT

Choosing a Multi-Channel Sound (MTS) track

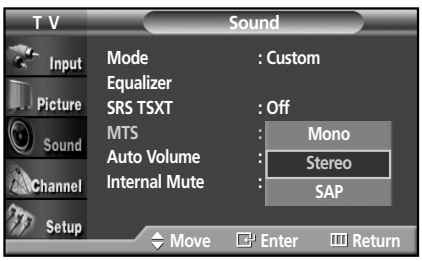
Depending on the particular program being broadcast, you can listen to Mono, Stereo or SAP.

1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.

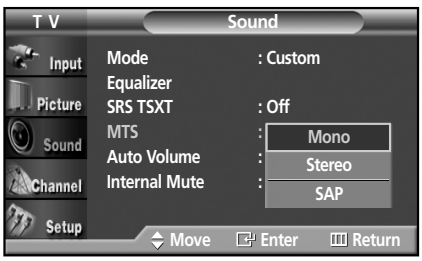
➢ Quick way to access the MTS menu: Just press "MTS" button on the remote control repeatedly to select one of the settings.



2 Press the ▲ or ▼ button to select "MTS", then press the ENTER button.

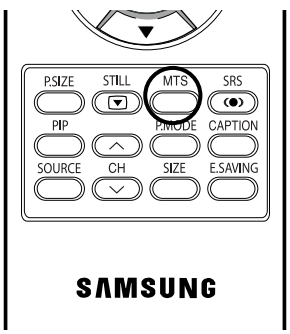


3 Press the ▲ or ▼ button to select a setting you want, then press the ENTER button.



4 Press the EXIT button to exit.

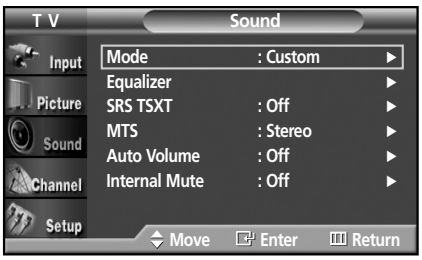
- Choose "Mono" for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose "Stereo" for channels that are broadcasting in stereo.
- Choose "SAP" to listen to the Separate Audio Program, which is usually a foreign-language translation.



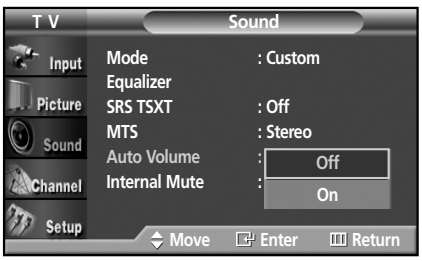
Using the Auto Volume

Each broadcasting station has its own signal conditions, which can make it necessary to adjust the volume every time the channel is changed. “Auto Volume” lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

1 Press the MENU button. Press the ▲ or ▼ button to select “Sound”, then press the ENTER button.

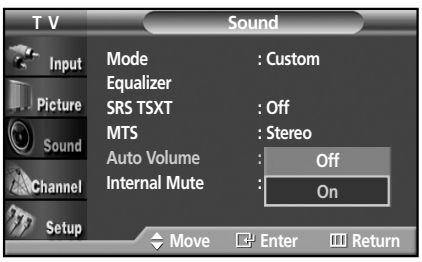


2 Press the ▲ or ▼ button to select “Auto Volume”, then press the ENTER button.



3 Press the ▲ or ▼ button to select “On”, then press the ENTER button.

- Pressing the ▲ or ▼ button will alternate between “On” and “Off”.



4 Press the EXIT button to exit.

Setting the On/Off Melody

A melody sound can be set to come on when the TV is powered on or off.

1 Press the MENU button. Press the ▲ or ▼ button to select “Setup”, then press the ENTER button.

2 Press the ▲ or ▼ button to select “Melody”, then press the ENTER button.

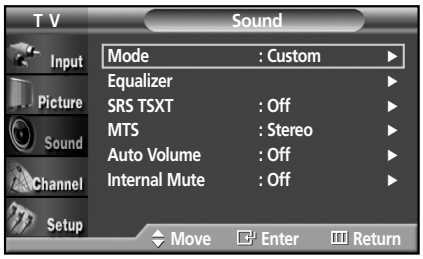
3 Press the ▲ or ▼ button to select “On” or “Off”, then press the ENTER button.

4 Press the EXIT button to exit.

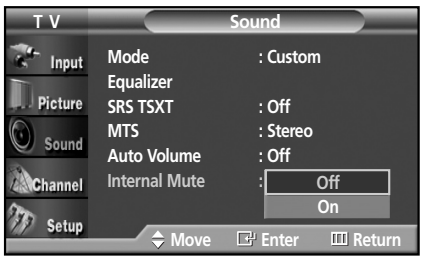
Selecting the Internal Mute

Sound output from the TV speakers is muted.

1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.



2 Press the ▲ or ▼ button to select "Internal Mute", then press the ENTER button.



3 Press the ▲ or ▼ button to select "On", then press the ENTER button.

- Pressing the ▲ or ▼ button will alternate between "On" and "Off".

4 Press the EXIT button to exit.

Notes

- The VOL +, VOL - and Mute buttons do not operate when the Internal Mute is set to On.
- When Internal Mute is ON, only MTS is selectable for the Sound.

SAMSUNG

PLASMA DISPLAY PANEL

Channel Control

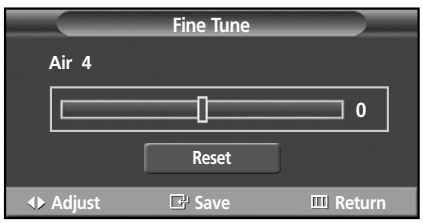
Fine Tuning Analog Channels 70
LNA (Low Noise Amplifier) 71

CH Fine Tuning Analog Channels

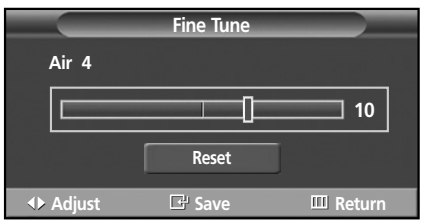
Use fine tuning to manually adjust a particular channel for optimal reception.

1 Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.

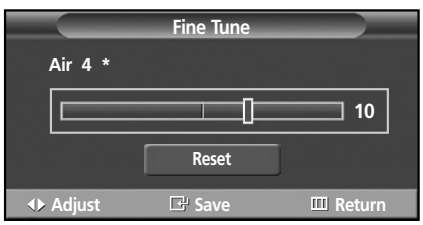
2 Press the ▲ or ▼ button to select "Fine Tune", then press the ENTER button.



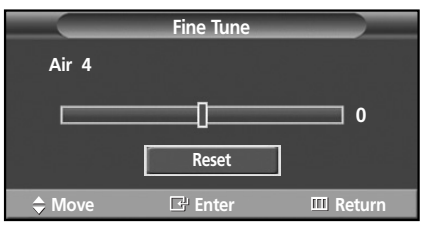
3 Press the ◄ or ► button to adjust the fine tuning.



4 To store the fine tuning setting in the TV's memory, press the ENTER button. (A star icon(*) will appear.) To reset the fine tuning to "0", press the ▼ button to select "Reset", then press the ENTER button.



5 Press the EXIT button to exit.



Notes

- Only analog TV channels can be fine tuned.
- "*" will appear next to the name of fine-tuned channels.

LNA (Low Noise Amplifier)

If the TV is operating in a weak-signal area, sometimes the LNA function can improve the reception (a low-noise preamplifier boosts the incoming signal).

1 Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.

2 Press the ▲ or ▼ button to select "LNA", then press the ENTER button.

3 Press the ▲ or ▼ button to select "On" or "Off", then press the ENTER button.

4 Press the EXIT button to exit.

Notes

- If the picture is noisy with the LNA set to On, select Off.
- The LNA setting must be made separately for each channel.

SAMSUNG

PLASMA DISPLAY PANEL

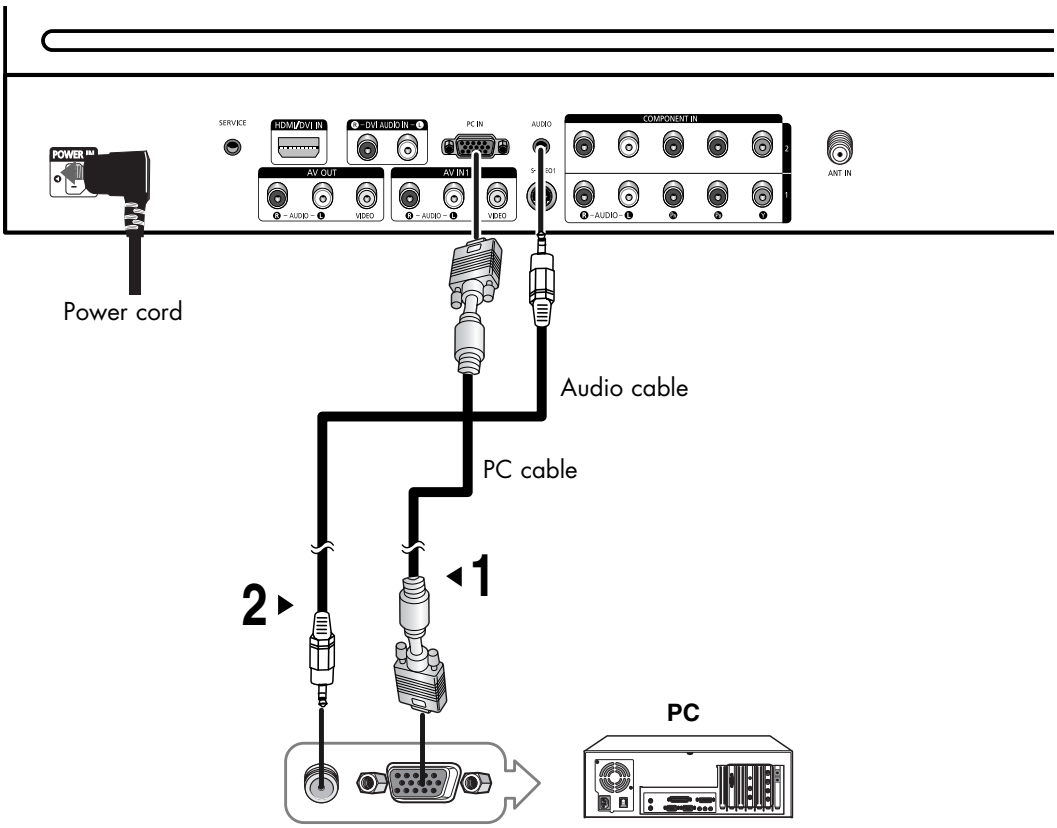
Connecting a PC and Operation

Connecting a PC.....74
Changing the Position of the Image.....78
Picture Quality Adjustment 79
Image Reset 82

Connecting a PC

Connection to a Macintosh computer may require an adapter.

TV Rear Panel



Connecting a PC (15p D-SUB) to the TV

1 Connect a PC cable between the PC Output jack on the PC and the RGB input jack (PC IN) on the TV.

2 Connect a Audio cable between the Audio jack on the PC and the Audio input jacks (AUDIO) on the TV.

Notes

- Please be sure to match the color coded input terminals and cable jacks.
- A PC will not operate when connected with a HDMI/DVI cable.

To watch the PC screen:

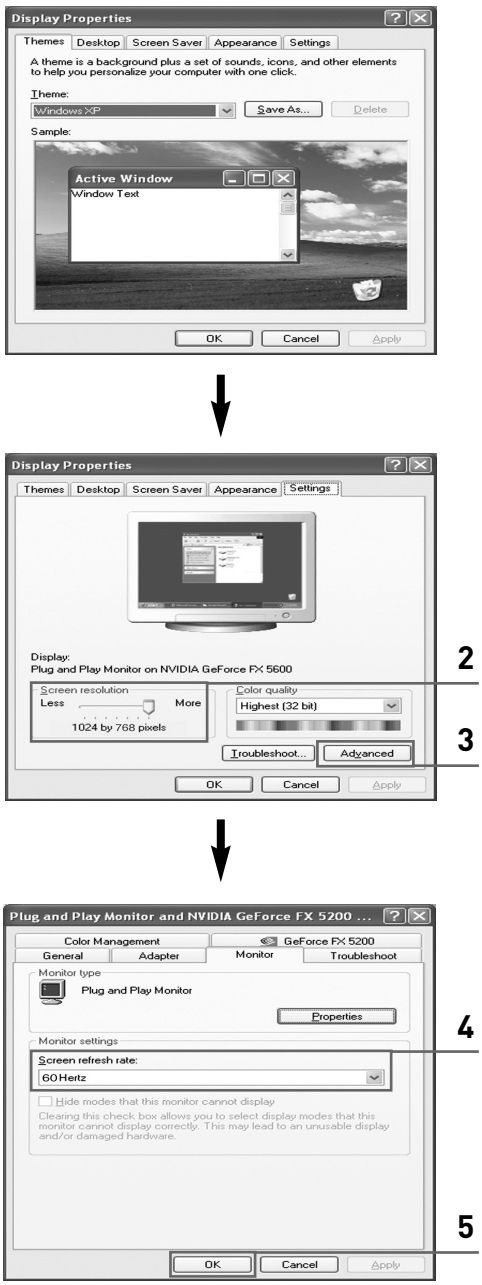
1. Turn on your TV.
2. Press the SOURCE button on the remote control or the SOURCE button on the side panel to select “PC”.
3. Turn on your PC and check for PC system requirements. (Refer to pages 76 and 77 for PC system requirements.)
4. Adjust the PC screen. (Refer to pages 78 to 81.)

Setting up Your TV (Plug and Play)

Our adoption of the new VESA® Plug and Play solution eliminates complicated and time consuming setup. It allows you to install your monitor in a Plug and Play compatible system, without the usual setup hassles and confusion. Your PC system can easily identify and configure itself for use with your TV. This TV automatically tells the PC system its Extended Display Identification data (EDID) using Display Data Channel (DDC) protocols.

How to Set up Your PC Software (Windows only)

The Windows display-settings for a typical computer are shown below. But the actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. But even if your actual screens look different, the same, basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or Samsung Dealer.)



1. Right click the mouse on the Windows Desktop, then click on Properties.
   The Display Dialog-Box will be displayed.

2. Click on Settings, then set the Display Mode with reference to the Display Modes Table.
   You do not need to change the Colors settings.

3. Click on Advanced. A new settings dialog box will be displayed.

4. Click on the Monitor tab, then set the Screen Refresh Rate with reference to the Display Modes Table. Set the Vertical Frequency and Horizontal Frequency individually if you can do so instead of setting the Screen Refresh Rate.

5. Press the OK button, close the window, then press the OK button on the Display Registration Information window. Automatic re-booting may commence at this moment.

6. Shutdown the PC, and connect it to your TV. (See page 74)

- The actual screens on your PC may look different, depending on your particular version of Windows and the type of your PC.
- When you use your TV as a PC monitor, it supports Colors up to 32 bits.
- In this case, the display on the TV may look different depending on your particular version of Windows or the PC manufacturer.
- When connecting a PC you must set it to the display settings that are supported by the TV. Otherwise, the message “Out of input range” will be displayed.

Continued...

Notes

Both screen position and size will vary, depending on the type of PC monitor and its resolution.
The table below shows all of the display modes that are supported:

Video Signal	Resolution (Dot X Line)	Vertical Frequency(Hz)	Horizontal Frequency(KHz)	Vertical Polarity	Horizontal Polarity
IBM PC / AT Compatible	640 X 350	70.086	31.469	P	N
	720 X 400	70.087	31.469	N	P
	640 X 480	59.940	31.469	N	N
		70.000	35.000	N/P	N/P
		72.809	37.861	N	N
		75.000	37.500	N	N
	800 X 600	56.250	35.156	N/P	N/P
		60.317	37.879	P	P
		70.000	43.750	N/P	N/P
		72.188	48.077	P	P
		75.000	46.875	P	P
	848 X 480	60.000	31.020	P	P
		74.769	37.684	P	N
	1024 X 768	60.004	48.363	N	N
		70.069	56.476	N	N
		72.000	57.672	N/P	N/P
		75.029	60.023	P	P
	1280 X 720	59.855	44.772	N	P
	1360 X 768	60.015	47.712	P	N

- The interlace mode is not supported.
- The TV operates abnormally if a non-standard video format is selected.
- The table above conforms to IBM/VESA regulations and is based on using the Analog Input.

Notes

- The PC text quality is optimum in WXGA mode (1360 x 768@60Hz).
- When this TV is used as a PC display, 32-bit color is supported.
- Depending on the manufacturer, your PC display screen might appear different.
  (and depending on your particular version of Windows.)
  Check your PC instruction book for information about connecting your PC to a TV.
- If a vertical and horizontal frequency-select mode exists, select 60Hz (vertical) and 48.4KHz (horizontal).
- In some cases, abnormal signals (such as stripes) might appear on the TV screen when the PC power is turned off (or if the PC is disconnected). If so, press the SOURCE button on the remote control or SOURCE button on the side panel to enter the VIDEO mode. Also, make sure that the PC is connected.

Changing the Position of the Image

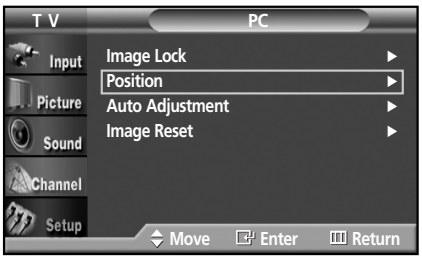
After connecting the TV to your PC, adjust the position of the screen if it is not well-aligned.

Preset:

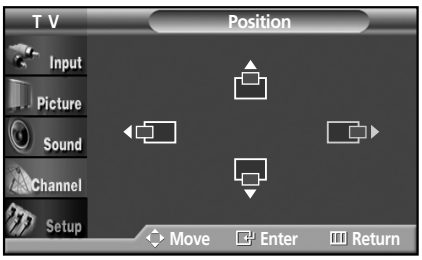
- Press the SOURCE button to select "PC."

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.

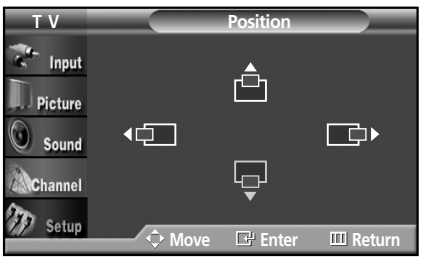
2 Press the ▲ or ▼ button to select "PC", then press the ENTER button.



3 Press the ▲ or ▼ button to select "Position", then press the ENTER button.



4 Adjust the position of screen by pressing the ▲/▼/◄/► button.



5 Press the EXIT button to exit.

Picture Quality Adjustment

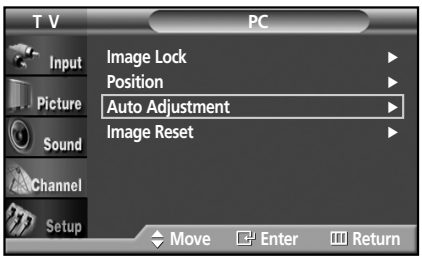
Picture Automatic Adjustment

Preset:

- Press the SOURCE button to select “PC”.

1 Press the MENU button. Press the ▲ or ▼ button to select “Setup”, then press the ENTER button.

2 Press the ▲ or ▼ button to select “PC”, then press the ENTER button.



3 Press the ▲ or ▼ button to select “Auto Adjustment”, then press the ENTER button.
The message “Auto Adjustment in progress. Please wait.” appears on the screen and the picture adjustments are automatically activated.

Press the EXIT button to exit.

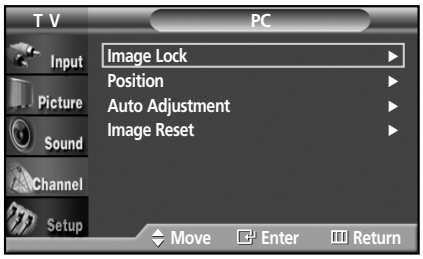
Coarse Adjustment

Preset:

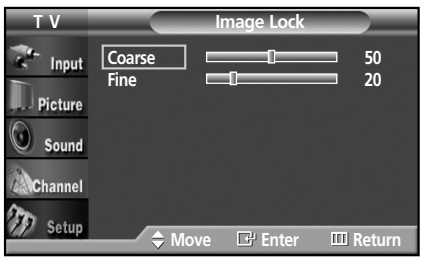
- Press the SOURCE button to select “PC”.

1 Press the MENU button. Press the ▲ or ▼ button to select “Setup”, then press the ENTER button.

2 Press the ▲ or ▼ button to select “PC”, then press the ENTER button.



3 Press the ENTER button to select “Image Lock”.



4 Press the ENTER button again to select “Coarse”. Remove picture noise (vertical stripes) on the screen by pressing the ◄ or ► button. (If Coarse is not set properly, vertical stripes will appear on the screen.)

- Press the ▲ or ▼ button to select another item.

5 Press the EXIT button to exit.

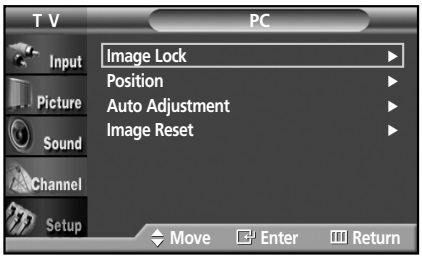
Fine Tuning (Fine)

Preset:

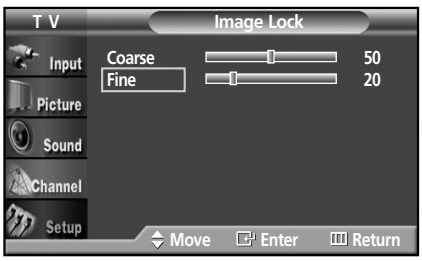
- Press the SOURCE button to select "PC".

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.

2 Press the ▲ or ▼ button to select "PC", then press the ENTER button.



3 Press the ENTER button to select "Image Lock".



4 Press the ▲ or ▼ button to select "Fine", then press the ENTER button.
Remove picture noise on the screen by pressing the ◄ or ► button. (If Fine is not set properly, noise will appear on the screen.)

- Press the ▲ or ▼ button to select another item.

5 Press the EXIT button to exit.

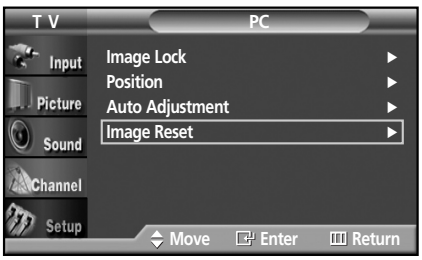
Image Reset

Preset:

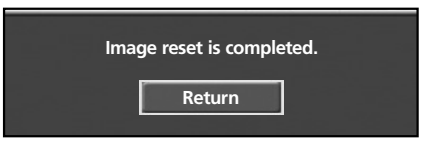
- Press the SOURCE button to select “PC”.

1 Press the MENU button. Press the ▲ or ▼ button to select “Setup”, then press the ENTER button.

2 Press the ▲ or ▼ button to select “PC”, then press the ENTER button.



3 Press the ▲ or ▼ button to select “Image Reset”, then press the ENTER button.
The message “Image reset is completed.” appears on the screen.



- The previously adjusted settings will be reset to the factory defaults.

Press the EXIT button to exit.

SAMSUNG

PLASMA DISPLAY PANEL

Time Setting

Setting the Clock 84
Setting the Sleep Timer 85
Setting the On/Off Timer 86

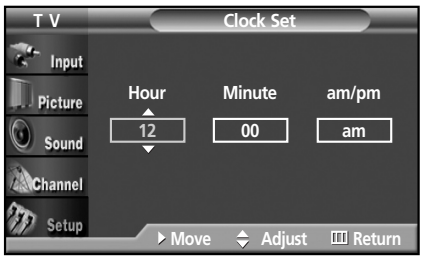
Setting the Clock

Setting the clock is necessary in order to use the various timer features of the TV.
Also, you can check the time while watching the TV. (Just press the INFO button.)

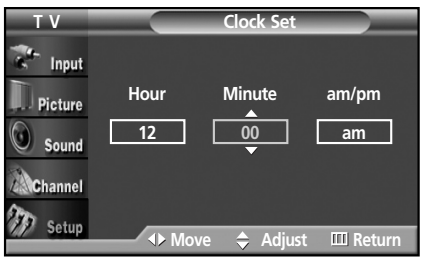
1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.

2 Press the ▲ or ▼ button to select "Time", then press the ENTER button.

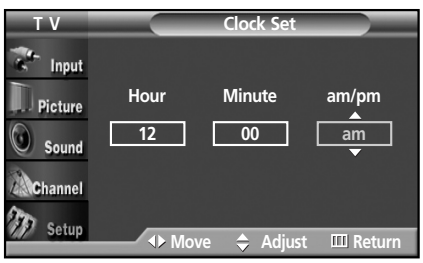
3 Press the ENTER button to select "Clock Set", then press the ▲ or ▼ button to select correct hour.



4 Press the ◄ or ► button to select "Minute", then press the ▲ or ▼ button to select correct minute.



5 Press the ◄ or ► button to select "am/pm", then press the ▲ or ▼ button to select the proper time of day (am or pm). Press the ENTER button.



6 Press the EXIT button to exit.

Notes

- The current time will appear every time you press the INFO button.
- You can set the Hour and Minute directly by pressing the number buttons on the remote control.

Setting the Sleep Timer

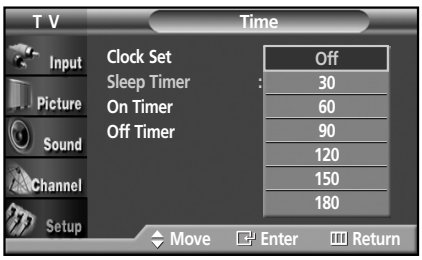
The sleep timer automatically shuts off the TV after a preset time (from 30 to 180 minutes).

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.

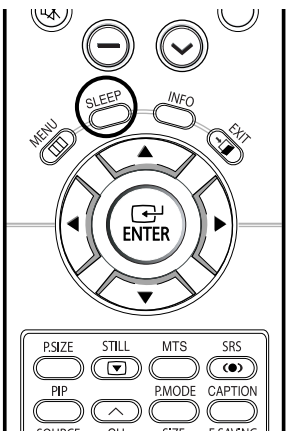
➢ Quick way to access the sleep timer setting: Just press "SLEEP" button on the remote control.

2 Press the ▲ or ▼ button to select "Time", then press the ENTER button.

3 Press the ▲ or ▼ button to select "Sleep Timer", then press the ENTER button.



4 Press the ▲ or ▼ button to select the time interval for the TV to stay on, then press the ENTER button.
The interval ranges from 30 to 180 minutes.



5 Press the EXIT button to exit.

Setting the On/Off Timer

1 Press the MENU button.
Press the ▲ or ▼ button to select “Setup”, then press the ENTER button.

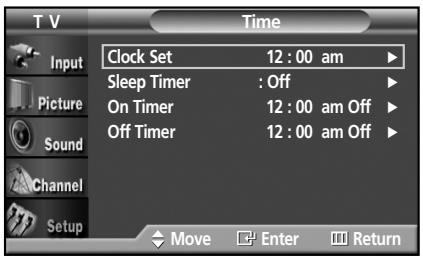
2 Press the ▲ or ▼ button to select “Time”, then press the ENTER button.

Press the ▲ or ▼ button to select “On Timer”, then press the ENTER button.
Press the ▲ or ▼ button to adjust “Hour”, then press the ► button to move to the next step.
Set other items using the same method as above.

To activate “On Timer” with the setting entered, set Activation to “Yes” by pressing ▲ or ▼ button.

When finished, press the MENU button to return.

- The current time will appear every time you press the INFO button.
- You can set the hour and minute directly by pressing the number buttons on the remote control.

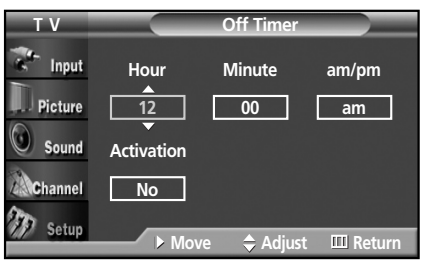


3 Press the ▲ or ▼ button to select “Off Timer”, then press the ENTER button.
Press the ▲ or ▼ button to adjust “Hour”, then press the ► button to move to the next step.
Set other items using the same method as above.

To activate “Off Timer” with the setting entered, set Activation to “Yes” by pressing ▲ or ▼ button.

When finished, press the ENTER button.

- You can set the hour and minute directly by pressing the number buttons on the remote control.



4 Press the EXIT button to exit.

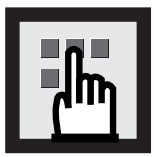
Note

- **Auto Power Off**
  When you set the timer “On”, the TV will eventually turn off, if no controls are operated for 3 hours after the TV was turned on by timer. This function is only available in timer “On” mode and prevents overheating, which may occur if a TV is on for too long.

SAMSUNG

PLASMA DISPLAY PANEL

Function Description



Selecting a Menu Language 88
Digital Noise Reduction 89
Setting the Blue Screen 90
Using the Color Weakness Enhancement Option 91
Viewing Closed Captions 92
Using the Energy Saving Feature 93
Preventing Screen Burn-in 94
Reducing the Effects of Screen Burn 95

Selecting a Menu Language

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.

2 Press the ▲ or ▼ button to select "Language", then press the ENTER button.

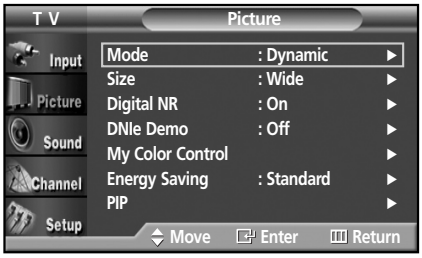
3 Press the ▲ or ▼ button to select the appropriate language: "English", "Français", "Español", or "Português".
Press the ENTER button.

4 Press the EXIT button to exit.

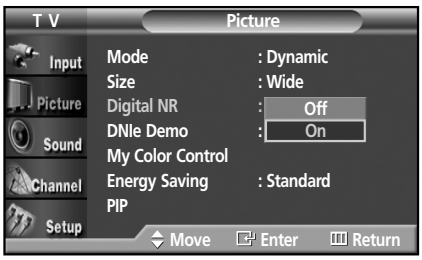
Digital Noise Reduction

If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.

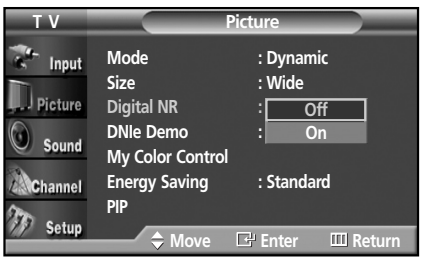
1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



2 Press the ▲ or ▼ button to select "Digital NR", then press the ENTER button.



3 Press the ▲ or ▼ button to select "On" or "Off", then press the ENTER button.



4 Press the EXIT button to exit.

Note

- The Digital NR function is available in all modes except PC.

Setting the Blue Screen

If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to continue viewing the poor picture, you must set the "Blue Screen" mode to "Off".

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.

2 Press the ▲ or ▼ button to select "Blue Screen", then press the ENTER button.

3 Press the ▲ or ▼ button to select "On" or "Off", then press the ENTER button.

Note

- Blue Screen is displayed when there is no signal from an external device in the External Mode, regardless of the Blue Screen Setting.

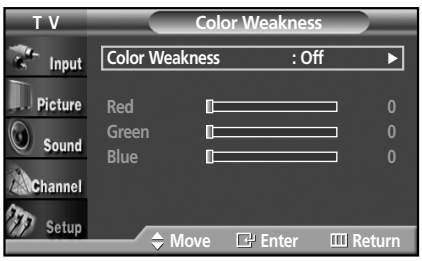
4 Press the EXIT button to exit.

Using the Color Weakness Enhancement Option

This option adjusts the Red, Blue or Green color to enhance the image according to the user's particular color weakness.

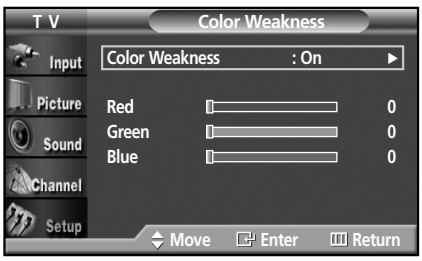
1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.

2 Press the ▲ or ▼ button to select "Color Weakness", then press the ENTER button.



3 Press the ENTER button. Press the ▲ or ▼ button to select "On", then press the ENTER button.
You will also see the items "Red", "Green", and "Blue".

- Pressing the ▲ or ▼ button will alternate between "On" and "Off".



4 Press the ▲ or ▼ button to select the item you wish to change, then press the ENTER button.
Press the ◄ or ► button to change the value of the item, then press the ENTER button.

Press the ▲ or ▼ button to select another item.

5 Press the EXIT button to exit.

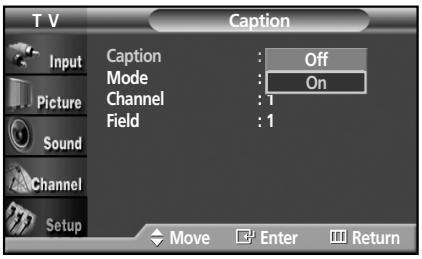
Viewing Closed Captions

Your TV decodes and displays the closed captions that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign language translations. All VCRs record the closed caption signal from television programs, so home-recorded video tapes also provide closed captions. Most prerecorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in your television schedule and on the tape's packaging: CC .

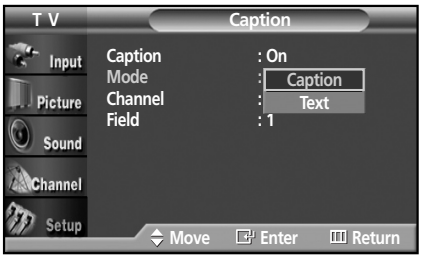
Note: The Caption feature does not work with DVD or DTV signals.

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.
Press the ▲ or ▼ button to select "Caption", then press the ENTER button.

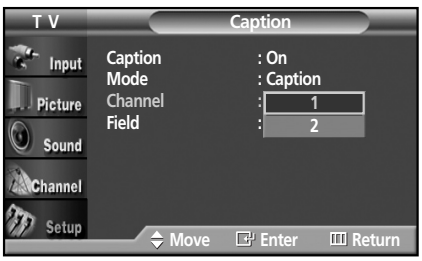
2 Press the ENTER button to select "Caption".
Press the ▲ or ▼ button to turn closed caption "On" or "Off", then press the ENTER button.



3 Press the ▲ or ▼ button to select "Mode", then press the ENTER button. Press the ▲ or ▼ button to select "Text" or "Caption", then press the ENTER button.



4 Depending on the particular broadcast, it might be necessary to make changes to "Channel" and "Field":
Press the ▲/▼/◄/► button to make the changes.
(Follow the same procedure as in steps 3 above.)



5 Press the EXIT button to exit.

Notes

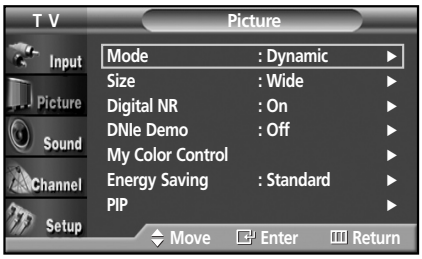
- Different channels and fields display different information: Field 2 carries additional information that supplements the information in Field 1. (For example, Channel 1 may have subtitles in English, while Channel 2 has subtitles in Spanish.)
- The Caption feature doesn't work in Component, PC, HDMI modes.
- The availability of captions depends on the program being broadcast.

Using the Energy Saving Feature

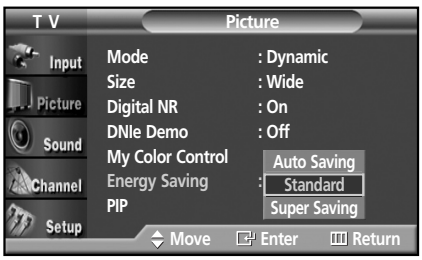
This feature adjusts the screen brightness automatically depending on the surrounding lighting conditions.

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

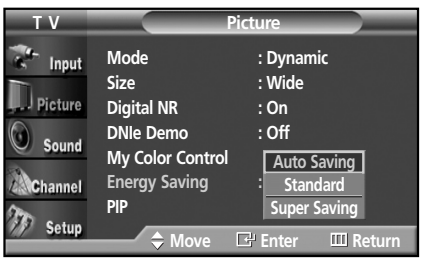
➢ **Quick way to select Energy Saving: Just press "E.SAVING" button on the remote control.**



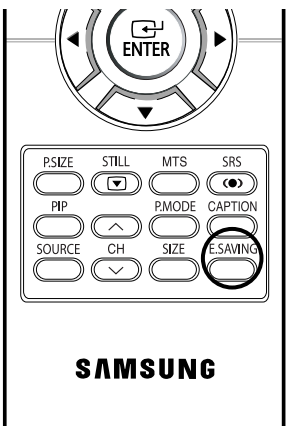
2 Press the ▲ or ▼ button to select "Energy Saving", then press the ENTER button.



3 Press the ▲ or ▼ button to select submenu (Auto Saving, Standard, or Super Saving) you want, then press the ENTER button.



- Auto Saving : Automatically adjusts to the surrounding illumination.
- Standard : Operates in standard mode regardless of the surrounding illumination.
- Super Saving : Enters maximum power saving mode regardless of the surrounding illumination.



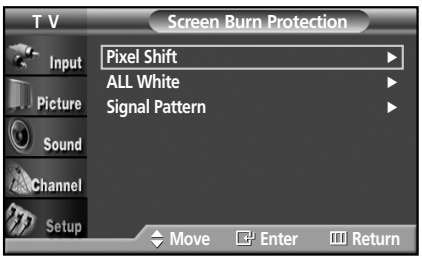
4 Press the EXIT button to exit.

Preventing Screen Burn-in

To reduce the possibility of screen burn, this unit is equipped with screen burn prevention technology. This technology enables you to set picture movement up/down (Vertical Line) and side to side (Horizontal Dot). The Time setting allows you to program the time between movement of the picture in minutes.

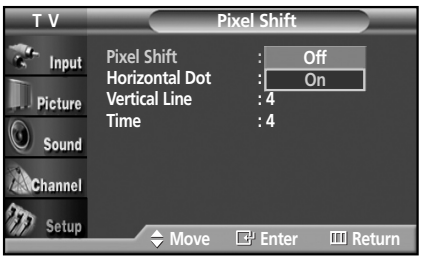
1 Press the MENU button.
Press the ▲ or ▼ button to select “Setup”, then press the ENTER button.

2 Press the ▲ or ▼ button to select “Screen Burn Protection”, then press the ENTER button.



3 Press the ENTER button to select “Pixel Shift”, then press the ENTER button.

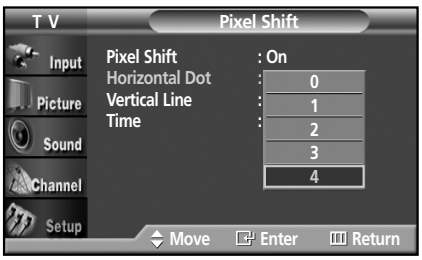
- Pressing the ▲ or ▼ button will alternate between “On” and “Off”.
  You will also see the items “Horizontal Dot”, “Vertical Line” and “Time”.
- Pixel Shift: Using this function, you can minutely move pixels on the PDP in horizontal or vertical direction to prevent after image on the screen.



4 Press the ▲ or ▼ button to select the item you wish to change, then press the ENTER button.
Press the ▲ or ▼ button to change the value of the item, then press the ENTER button.

- Optimum condition for pixel shift;

Horizontal Dot	4
Vertical Line	4
Time(min)	4



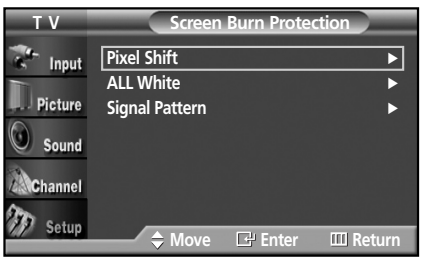
5 Press the EXIT button to exit.

Reducing the Effects of Screen Burn

If screen burn has occurred, you can select a white screen or signal pattern (rolling screen) to help remove screen burn artifacts.

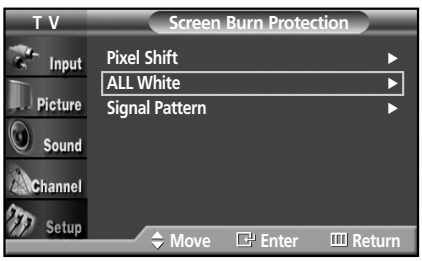
1 Press the MENU button.
Press the ▲ or ▼ button to select “Setup”, then press the ENTER button.

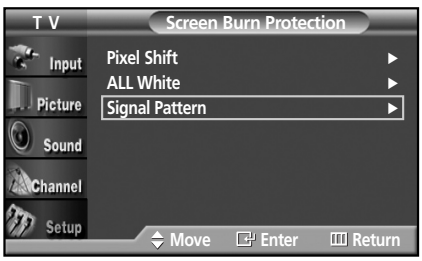
2 Press the ▲ or ▼ button to select “Screen Burn Protection”, then press the ENTER button.



3 Press the ▲ or ▼ button to select “ALL White” or “Signal Pattern”, then press the ENTER button.

- ALL White: This function removes after-images on the screen by changing the color of pixels to white. Use this function when there are remaining after-images or symbols on the screen especially when you displayed a still image on the screen for a long time.
- Signal Pattern: This function removes after-images on the screen by running a special pattern. Use this function when there are remaining after-images or symbols on the screen especially when you displayed a still image on the screen for a long time.





4 Press the EXIT button to exit.

Notes

- To remove after-images on the screen, use either the “ALL White” or “Signal Pattern” function. Although both functions remove after-images on the screen, “Signal Pattern” is more effective.
- The after-image removal function has to be executed for a long time (approximately 1 hour) to effectively remove after-images on the screen. If the after-image is not removed after performing the function, repeat the function again.
- Press any key on the remote control to cancel this feature.

SAMSUNG

PLASMA DISPLAY PANEL

Appendix

Troubleshooting.....98
Care and Maintenance 99
Specifications 100

Troubleshooting

If the TV seems to have a problem, first try this list of possible problems and solutions.
If none of these troubleshooting tips apply, then call your nearest service center.

Problem	Possible Solution
Poor picture.	Check all wire connections.
No picture or sound.	Try another channel. Press the SOURCE button. Make sure the TV is plugged in. Check the antenna connections. Check that the Mute feature is Off. Check if Internal Mute is set to ON.
Poor sound quality.	Try another channel. Adjust the volume.
Your remote control does not operate the TV.	Check the battery charge of the remote control.
The TV won't turn on.	Check if the power plug is connected.
There is no screen images.	Check to see that both the TV and the source are plugged in and turned on.
The image is too light or too dark.	Adjust the Brightness or Contrast settings.
The image is too large or too small.	Adjust the Size settings.
Digital broadcasting screen problem.	Please check the digital signal strength and input antenna.
Screen is black and power indicator light blinks steadily.	On your computer, check Power, Signal Cable. The TV is using its power management system. Move the computer's mouse or press any key on the keyboard.
	On your equipment check (STB, DVD, etc) ; Power, Signal Cable. The TV is using its power management system. Press the Source button on the panel or remote control. Turn the TV off and on.
The visual qualities of digital channels vary.	The visual qualities of digital channels may vary depending on the original production method (analog or digital). ➔ Classification by the information displayed when switching channels. ➔ If the original production method is digital: High visual quality program. ➔ If the original production method is analog: The digital program displayed on the screen is originally an analog program which has been converted. The visual quality is of an SD grade.
Although the TV caption shows HD, the visual quality is not satisfactory.	The HD caption that appears when switching channels or when pressing the Information button on the remote control means the selected channel is simply a digital channel. If the broadcasting station converts an analog signal into digital and transmits the signal, the visual quality may not be perfect. (Applied to Set Top Box built-in model only.)

Care and Maintenance

Please follow these guidelines to get the maximum performance from your TV.

Identifying Problems

- Do not put the TV near extremely hot, cold, humid or dusty places.
- Do not put the TV near appliances that create magnetic fields.
- Keep the ventilation openings clear.
- Do not place the TV on a rough and slanted surface, such as cloth or paper.

Liquids

- Do not place liquids near or on the TV.

Cabinet

- Never open the cabinet or touch the parts inside.
- Wipe your TV with a clean, dry cloth. Never use water, cleaning fluids, wax, or chemicals.
- Do not put heavy objects on top of the cabinet.

Temperature

- If your TV is suddenly moved from a cold to a warm place, unplug the power cord for at least two hours so that moisture that may have formed inside the unit can dry completely.

Specifications

Exterior design and product specifications are subject to change without prior notice to improve the performance of this product.

Model		PL-50P5H
Dimensions	Display	48.43 (W) x 32.52 (H) x 3.72 (D) inches (Without Stand)
		48.43 (W) x 34.47 (H) x 13.18 (D) inches (With Stand)
Weight	Display	46.8 Kg / 103.17 lbs (Without Stand)
		53.5 Kg / 117.95 lbs (With Stand)
Voltage		AC 100-240V±10%, 50/60Hz AC 100-240V±10%, 60Hz (Mexico only)
Power Consumption		420 W
Number of Pixels		1366 (H) x 768 (V)
Screen Size		50 inches
ANTENNA input		ANT IN ※ 75Ω unbalanced
VIDEO input		AV1, AV2 S-VIDEO1, S-VIDEO2 COMPONENT1 - 480i,P/576i,P/720P/1080i COMPONENT2 - 480i,P/576i,P/720P/1080i PC HDMI (DVI Compatible)
AUDIO input		AV1, AV2 S-VIDEO1, S-VIDEO2 COMPONENT1 - 480i,P/576i,P/720P/1080i COMPONENT2 - 480i,P/576i,P/720P/1080i PC DVI
Sound Output		AUDIO (L/R)

This page is intentionally left blank.

This page is intentionally left blank.

This page is intentionally left blank.

Contact SAMSUNG WORLD-WIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

Contacte con SAMSUNG WORLD-WIDE

Si tiene alguna pregunta o comentario referente a nuestros productos, por favor contacte con nuestro Servicio de Atención al Cliente.

Contate a SAMSUNG EM TODO O MUNDO

Caso tenha dúvidas ou comentários sobre os produtos da Samsung, entre em contato com o centro de atendimento ao cliente da SAMSUNG.

Country	Customer Care Center ☎	Web Site
ARGENTINE	0800-333-3733	www.samsung.com/ar
BRAZIL	0800-124-421	www.samsung.com/br
CHILE	800-726-7864 (SAMSUNG)	www.samsung.com/cl
COSTA RICA	0-800-507-7267	www.samsung.com/latin
ECUADOR	1-800-10-7267	www.samsung.com/latin
EL SALVADOR	800-6225	www.samsung.com/latin
GUATEMALA	1-800-299-0013	www.samsung.com/latin
JAMAICA	1-800-234-7267	www.samsung.com/latin
MEXICO	01-800-SAMSUNG (7267864)	www.samsung.com/mx
PANAMA	800-7267	www.samsung.com/latin
PUERTO RICO	1-800-682-3180	www.samsung.com/latin
REP. DOMINICA	1-800-751-2676	www.samsung.com/latin
TRINIDAD & TOBAGO	1-800-7267-864	www.samsung.com/latin
VENEZUELA	1-800-100-5303	www.samsung.com/latin